



Republic of the Philippines  
**Department of Education**

AUG 30 2012

DepEd MEMORANDUM  
No. **149**, s. 2012

**NATIONAL SCIENCE AND TECHNOLOGY FAIR FOR 2012-2013**

To: Undersecretaries  
Assistant Secretaries  
Bureau Directors  
Regional Directors  
Schools Division/City Superintendents  
Heads, Public and Private Secondary Schools

1. The Department of Education (DepEd) through the Bureau of Secondary Education (BSE) announces the conduct of the **National Science and Technology Fair (STF) for 2012-2013** from November 28 to December 1, 2012 at a venue to be announced later. The conduct of the school, division, and regional STF shall be held on the following dates:

Level	Date	Venue
School	September 7-9, 2012	To be determined by the school, division and region
Division	September 21-23, 2012	
Regional	October 6-7, 2012	

2. The STF aims to promote Science and Technology consciousness among the youth and identify the most creative/innovative and the best Science researchers who will represent the country in the Intel International Science and Engineering Fair (Intel ISEF). For the next four (4) years, the schools are encouraged to promote Science investigatory projects which will address the **environmental protection and conservation of the ecosystem**.

3. The official participants from each region at the national level DepEd-BSE Science and Technology Fair, shall only be the *Rank 1 Regional Winners in each of the different categories whose entries have been approved by the national level Scientific Review Committee (SRC)*, the individual and the team project researchers represented only by the project leader; two (2) selected teacher-advisers; one (1) regional coordinator or a total of eight (8) per region.

4. The travel expenses of participants in the national level STF shall be charged to local funds or other sources; while the expenses of the BSE staff, board and lodging of official participants, materials, transportation/communication relative to these activities, prizes/cash awards, and honoraria of members of the SRCs, Board of Judges (BOJs), and external or non-DepEd resource persons shall be charged to the nationwide lump sum in support of the RSHSs (A.III.e.17.b), subject to the usual accounting and auditing rules and regulations.

5. The following enclosures will be used as references:

- Enclosure No. 1 – Guidelines on the National STF 2012-2013;
- Enclosure No. 2 – Schematic Diagram on the Flow of STF Activities;
- Enclosure No. 3 – 2012 Calendar of Important STF Activities and Requirements;
- Enclosure No. 4 – Format of Research Paper;
- Enclosure No. 5 – Data on the Number of Participants for STF 2012-2013; and
- Enclosure No. 6 – Scientific Review of STF Project Write-up.

6. The regional coordinators (RCs), division science and mathematics supervisors, schools heads (SHs) and participants are expected to download softcopies of the International Rules for Pre-college Science Research: Guidelines for Science and Engineering Fair 2012-2013 and required forms through website address: <http://www.societyforscience.org/isef/rulesandguidelines> for their guidance.

7. The registration fee for each participant is as follows:

Level	Participant	Registration Fee
Division	<ul style="list-style-type: none"> <li>• Student with entries</li> <li>• Research-adviser</li> <li>• Supervisors in Science and Mathematics</li> </ul>	PhP2,000.00
Regional	<ul style="list-style-type: none"> <li>• Student with entries</li> <li>• Research-adviser</li> <li>• Supervisors in Science and Mathematics</li> </ul>	PhP4,500.00

8. This registration fee shall be charged to local funds subject to the usual accounting and auditing rules and regulations. This will cover prizes, board and lodging of participants and their advisers, Science and Mathematics supervisors, and the materials needed to the conduct of the STF. The subsidy to cover the payment for honoraria of the member of the Science Review Committee (SRC) and Board of Judges (BOJ) relative to the conduct of Regional STF shall be downloaded to the regions.

9. The regional coordinators are requested to submit to BSE (Attn.: Ms. Maria Amparo Ventura/Mr. Joseph Jacob) reports using the format in Enclosure No. 5 **on or before October 12, 2012.**

10. All other activities relative to Science and Mathematics investigatory projects including those of the private associations shall be harmonized with the activities of the Science Fair from November 28 to December 1, 2012.

11. For more information, interested individuals may contact **Ms. Maria Amparo Ventura** or **Mr. Joseph Jacob**, Education Program Specialists of the Bureau of Secondary Education-Curriculum Development Division (BSE-CDD), 3rd Floor, Bonifacio Bldg., DepEd Complex, Meralco Avenue, Pasig City at telephone no.: (02) 632-7746 or through e-mail addresses: [ampyventura@gmail.com](mailto:ampyventura@gmail.com) and [j\\_jacob@yahoo.com](mailto:j_jacob@yahoo.com).

12. Immediate dissemination of this Memorandum is desired.

  
**BR. ARMIN A. LUISTRO FSC**  
 Secretary

Encls.: As stated

Reference: DepEd Memorandum No.: 190, s. 2011

To be indicated in the Perpetual Index  
under the following subjects:

CONTESTS  
SCIENCE EDUCATION

SCHOOLS  
STUDENTS

**Enclosure No. 1 to DepEd Memorandum No. 149, s. 2012**

**GUIDELINES ON THE NATIONAL SCIENCE AND TECHNOLOGY FAIR 2012-2013**

Similar to the previous national level fair, the National Science and Technology Fair (STF) for 2012-2013 is an Intel ISEF-affiliated fair. As such, the requirements for affiliated fairs should be met and followed as stated in the ISEF guidelines mentioned on page 2 of this Memorandum.

**1. The Science Fair**

The Bureau of Secondary Education of the Department of Education (BSE-DepED) shall conduct the **National STF 2012-2013** on **30 November** to **1 December**.

The STF is a nationwide Science research competition that aims to promote Science and Technology consciousness among the youth. It also aims to identify the most creative and the best Science student researchers who will represent the country in the Intel International Science and Engineering Fair 2013 (Intel ISEF 2013) and other various international/regional science fairs.

**2. The Competitions**

The competitions will be conducted among high school students only. Students from all high schools offering Special Science Curriculum (such as RSHSs and S & T Oriented HSs,) are **expected** to join the said competition.

The first place winners in each of the categories per cluster at the Regional level shall represent the region to the National STF competition.

The competition will start at the school level advancing to the division, regional, national then to the international level. The participation of schools in the National STF shall be clustered into two types of schools as follows:

<b>Cluster 1</b> – composed of students from <u>regular</u> high schools of both public and private and laboratory high schools of colleges and universities				<b>Cluster 2</b> – composed of students from <u>Science high schools</u> of both public and private schools, and laboratory high schools of universities and colleges			
Life Science		Physical Science		Life Science		Physical Science	
Individual Project	Team Project	Individual Project	Team Project	Individual Project	Team Project	Individual Project	Team Project

**3. Levels of Competition**

**School/Division Level**

The conduct of the school/division level shall be done on a weekend to conform with DepEd Order No. 26, s. 2010 (Calendar of School Events and Activities For SY 2010-2011))

The school and division level STF should refer to Enclosure No. 3 for the schedules of the competition.

Project of proponents should have been screened by the IRB/SRC at the school level. The Division Science/Mathematics Supervisor shall be a member of the BOJs who shall determine the school/division winners of the different categories and fair divisions.

Students of both regular and Science high schools of private and public high schools shall participate in the division level STF.

Winners at the school level should be officially endorsed to the Division for the division level. Likewise, the division level winners should be officially endorsed to the region.

### **Regional Level**

The first place winners at the division level in both clusters shall have been properly scrutinized by identified members of the SRC for the regional level competition.

The first place winners at the regional level shall be officially endorsed by the Regional Office to DepEd Central Office through the Bureau of Secondary Education.

### **National Level**

The First Place winners of both clusters in the different categories shall represent the region to the national level STF to be conducted on 28 November to 1 December 2012 at a venue to be announced later.

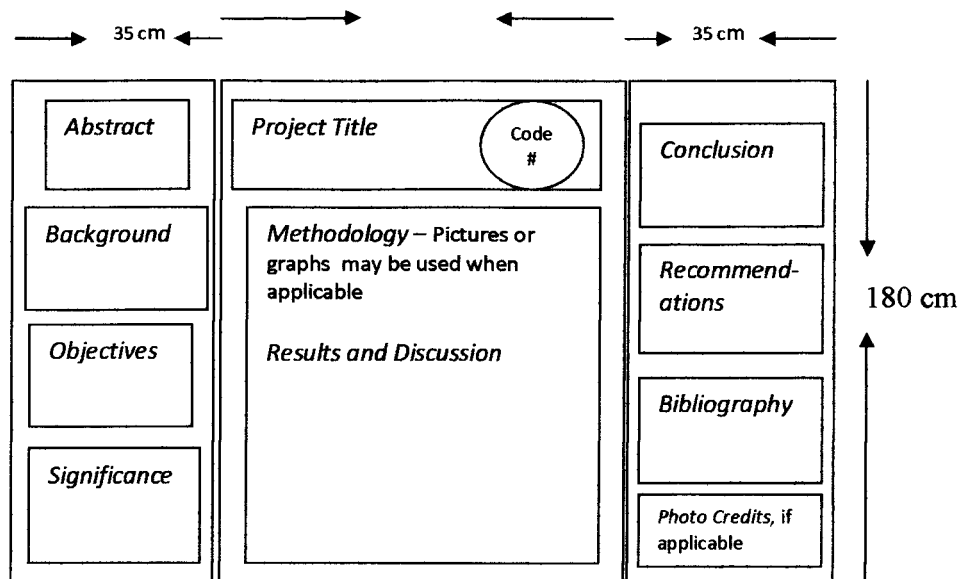
## **4. The Research Project**

Science research projects must conform with international rules published by the **Intel International Rules for Pre-college Science Research: Guidelines for Science and Engineering Fairs 2012-2013**. Each project is expected to have a Research Adviser and an Institutional Review Board (IRB) or a Scientific Review Committee (SRC).

The research project should cover a maximum of twelve (12) continuous months from January 2012 to December 2012. However, since the National STF is in November, then the complete write-up should have been done before November 2012.

**Ethics Statement. Scientific fraud and misconduct is not condoned at any level of research or competition. Plagiarism, use or presentation of other research's work as one's own and fabrication of data will not be tolerated. Fraudulent projects are disqualified for the competition.**

## 5. The Exhibit



### 5.1 Display and Safety Regulations

The project display using tarpaulin summarizes the research project and must focus on the proponent's work for this year's study, and if applicable, with only minimal reference to previous research.

The safety regulations that must be adhered to should be consistent with the guidelines found on page 23 of the ISEF guidelines (<http://www.societyforscience.org/isef/rulesandguidelines>).

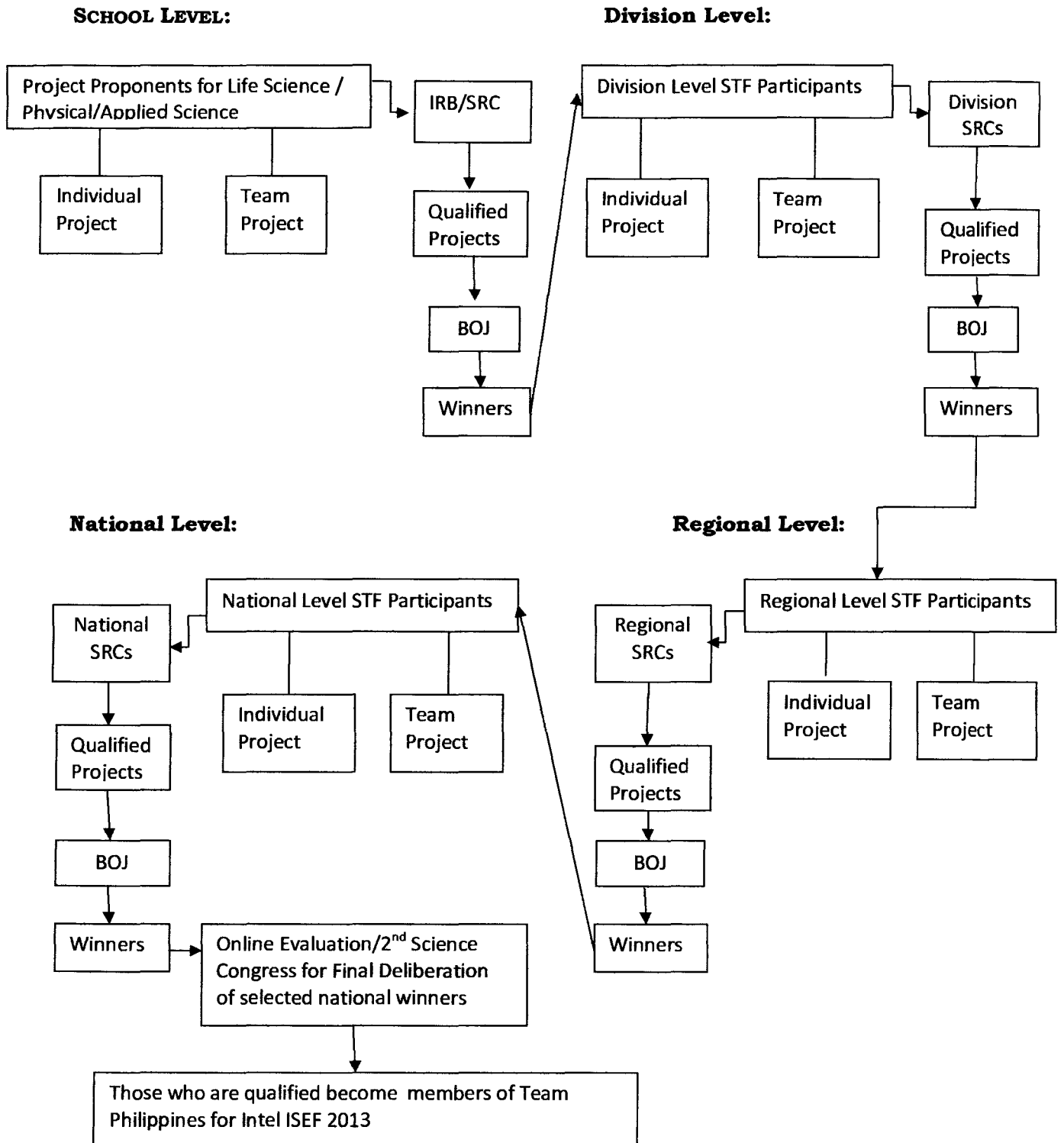
The following items should be seen in the project display: Abstract, Background, Objectives, Significance, Methodology, Results and Discussion, Conclusion, Recommendations, Bibliography and if applicable, Photo Credits (including illustrations and graphics)

Note that a proponent should **not** include his/her face in the project's procedure/illustration in the display.

### 5.2 Requirements for presentation by the Project Proponent/s to the BOJs during the exhibit are the following:

- Copy of the required forms
- Copy of the research write-up
- Project data book or student journal complete with dates of entry, number of pages, and all other details (Refer also at ISEF Student Handbook website: <http://www.societyforscience.org/document.doc?id=12>)

**SCHEMATIC DIAGRAM OF THE FLOW OF STF ACTIVITIES**



*Handwritten signature*

**Enclosure No. 3 to DepEd Memorandum No. 149, s. 2012**

**CALENDAR OF IMPORTANT STF ACTIVITIES AND REQUIREMENTS**

<b>Activity</b>	<b>Date</b>	<b>Required Items</b>	<b>Persons Involved</b>	<b>Venue</b>
<b>Conduct of School STF</b>	<b>7-9 Sept. 2012</b>	<b>4 copies of write-ups</b>	<b>Project proponents Project advisers Dept. Heads/Div. Science and Math Supervisors</b>	<b>Respective schools</b>
<b>Conduct of Division STF</b>	<b>21-23 Sept. 2012</b>	<b>4 copies of write-ups</b>	<b>Project proponents Project advisers Dept. Heads/Div. Science and Math Supervisors</b>	<b>Designated Schools</b>
<b>Conduct of Regional Level STF</b>	<b>6-7 Oct. 2012</b>	<b>4 copies of write-ups</b>	<b>Project proponents Project advisers Dept. Heads/Div. Science and Math Supervisors</b>	<b>Designated Schools</b>
<b>Submission to BSE of the Regional entries <u>properly endorsed by the RO</u></b>	<b>15 Oct. 2012</b>	<b>4 copies of write-ups and soft copy to be emailed at <a href="mailto:ampyventura@gmail.com">ampyventura@gmail.com</a> and <a href="mailto:ljacob@yahoo.com">ljacob@yahoo.com</a></b>	<b>BSE Staff Project proponents Project advisers Dept. Heads / Div. And Regional Science and Math Supervisors</b>	<b>RO to CDD-BSE</b>
<b>Submission of entries to National SRCs</b>	<b>22 Oct. 2012</b>	<b>4 copies of write-ups (the soft copy should have been submitted at this time)</b>	<b>BSE Staff</b>	<b>Identified addresses</b>
<b>Meeting of SRCs members for deliberation and submission of consolidated SRC forms</b>	<b>6-7 Nov. 2012</b>	<b>Master list of participants Master list of SRCs Write-ups Evaluation Form for SRCs</b>	<b>Identified SRCs BSE Staff</b>	<b>BSE Conference Room</b>
<b>Meeting of RCs and return of manuscripts /write-ups to RCs</b>	<b>7-8 Nov. 2012</b>	<b>Affiliated Questionnaire matrix (master list of proponents using ISEF matrix) Evaluation Forms per project with SRC comments</b>	<b>RCs Project Proponents</b>	<b>BSE Conference Room</b>
<b>Submission of Write-up to BSE</b>	<b>16 Nov. 2012</b>	<b>Submission of write-ups to BSE</b>	<b>BSE Staff</b>	<b>CDD-BSE</b>
<b>Submission of write-ups to identified BOJs</b>	<b>21 Nov. 2012</b>	<b>one copy each of the identified BOJs</b>	<b>BSE Staff</b>	<b>Identified addresses</b>
<b>Actual conduct of the National STF</b>	<b>28 Nov. to 1 Dec. 2012</b>	<b>Display tarpaulins</b>	<b>Regional delegates Project advisers RCS and BOJs</b>	<b>To be announced</b>

## Enclosure No. 4 to DepEd Memorandum No. 149, s. 2012

### Format of Research Paper

Investigatory papers that were reviewed by the national SRCs in the past years were found to have inadequacies in the content particularly in the areas cited below. These rules are found in the Guidelines (<http://www.societyforscience.org/isef/rulesandguidelines>) and in the Student Handbook (<http://www.societyforscience.org/document.doc?id=12>). The **description** of the research plan and the **sample abstracts** are provided for references and information.

I. **Research Plan:** (This is compiled separately from the rest of the investigatory paper): All projects should include the following:

- A. Question or Problem being addressed
- B. Goals/Expected Outcomes/Hypotheses
- C. Description in detail of method or procedures (The following are important and key items that should be included when formulating ANY AND ALL research plans.)
  - **Procedures:** Detail all procedures and experimental design to be used for data collection.
  - **Data Analysis:** Describe the procedures you will use to analyze the data/results that answer research questions or hypotheses.
- D. **Bibliography:** List at least five (5) major references (e.g. science journal articles, books, internet sites) from your literature review. If you plan to use vertebrate animals, one of these references must be an animal care reference.

II. **Project Data Book:**

A project data book is your most treasured piece of work. Accurate and detailed notes make a logical and winning project. Good notes show consistency and thoroughness to the judges and will help you when writing your research paper. Data tables are also helpful. They may be a little 'messy' but be sure the quantitative data recorded is accurate and that units are included in the data tables. Make sure you date each entry.

III. **Research Paper:**

A research paper should be prepared and available along with the project data book and any necessary forms or relevant written materials. A research paper helps organize data as well as thoughts. A good paper includes the following sections.

- a) **Title Page and Table of Contents:** The title page and table of contents allows the reader to follow the organization of the paper quickly.
- b) **Introduction:** The introduction sets the scene for your report. The introduction includes the purpose, your hypothesis, problem or engineering goals, an explanation of what prompted your research, and what you hoped to achieve.
- c) **Materials and Methods:** Describe in detail the methodology you used to collect data, make observations, design apparatus, etc. Your research paper should be detailed enough so that someone would be able to repeat the experiment from the information in your paper. Include detailed photographs or drawings of self-designed equipment. Only include this year's work.



- d) **Results:** The results include data and analysis. This should include statistics, graphs, pages with your raw collected data, etc.
- e) **Discussion:** This is the essence of your paper. Compare your results with theoretical values, published data, commonly held beliefs, and/or expected results. Include a discussion of possible errors. How did the data vary between repeated observations of similar events? How were your results affected by uncontrolled events? What would you do differently if you repeated this project? What other experiments should be conducted?
- f) **Conclusions:** Briefly summarize your results. State your findings in relationships of one variable with the other. Support those statements with empirical data (one average compared to the other average, for example). Be specific, do not generalize. Never introduce anything in the conclusion that has not already been discussed. Also mention practical applications.
- g) **Acknowledgements:** You should always credit those who have assisted you, including individuals, businesses and educational or research institutions. However, acknowledgments listed on a project board are a violation of D & S Display rules and must be removed.
- h) **References/Bibliography:** Your reference list should include any documentation that is not your own (i.e. books, journal articles, websites, etc.). See an appropriate reference in your discipline for format or refer to the Instructions to Authors of the appropriate publication. Three common reference styles are:

1. **APA (American Psychological Association) Style :**

- <http://apastyle.apa.org/>
- <http://www.calvin.edu/library/knightcite/index.php>
- <http://owl.english.purdue.edu/owl/section/2/10/>

This resource offers examples for the general format of APA research papers, in-text citations, endnotes/footnotes, and the reference page.

2. **MLA (Modern Language Association) Format:**

- <http://www.mla.org/style>
- <http://www.calvin.edu/library/knightcite/index.php>
- <http://owl.english.purdue.edu/owl/section/2/11/>

This resource offers examples for the general format of MLA research papers, in-text citations, endnotes/footnotes, and the Works Cited page.

3. **The Chicago Manual of Style:**

- <http://www.chicagomanualofstyle.org/home.html>
- <http://www.calvin.edu/library/knightcite/index.php>

The Chicago Manual of Style presents two basic documentation systems. The more concise author-date system has long been used by those in the physical, natural, and social sciences. In this system, sources are briefly cited in the text, usually in parentheses, by author's last name and date of publication. The short citations are amplified in a list of references, where full bibliographic information is provided.

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#### 4. Abstract:

After finishing research and experimentation, an abstract should be written. This needs to be a maximum of 250 words on one page. It should include the a) purpose of the experiment, b) procedures used, c) data, and conclusions. It also may include any possible research applications. Only minimal reference to previous work may be included. The abstract must focus on work done in the current year and should not include a) acknowledgments, or b) work or procedures done by the mentor. See below for examples of award winning abstracts. See page 28 of the International Rules for the proper formatting of an Official Intel ISEF Abstract and Certification. Please Note: The official abstract form is only for those participating in ISEF. This form may not be required for other levels of competition.

#### Sample Abstracts

2002 ISEF First Grand Award, Physics	2002 ISEF First Grand Award, Microbiology
<b>A Novel Application of Locally Formulated Cholesteric Liquid Crystals in Dosimetry</b>	<b>.Antibiotic Substance Obtained from the Parotid Gland Secretions of the Toad (<i>Bufo marinus</i>)</b>
By Estrella, Allan N., Macalintal, Jeric V., Manapat, Richard K.S. Adviser: Mr. Jonathan Derez Manila Science High School	By Rara, Prem Vilas Fortran M. Adviser: Dr. Jose M. Oclarit Integrated Development School-MSU-Iligan Institute of Technology
<p>Radiation has many industrial and economic uses. However, it poses a danger on those people working near it. To settle with this, dosimetry was introduced. Many kinds of dosimeters such as silver halides, thermoluminescent dosimeters, and semi-conductor dosimeters were developed. This study focuses on the potential use of liquid crystals as a dosimeter.</p> <p>Three mixtures of liquid crystals were prepared using nematic E48, cholesteric TM74A and Canola oil synthesized cholesteric liquid crystal with mass ratios (E48: TM74A) of Mixture A (Mixture A), 30:70 (Mixture B) and (E48: Canola) 30:70 (Mixture C). The liquid crystals were then mounted to cells made from polyethylene sheets. Three samples were prepared for each mixture. The samples were then exposed to cobalt-60 for gamma radiation with doses of 2.5 kgy, 5 kgy, 10 kgy, 15 kgy, 20 kgy, 25 kgy and 30 kgy. After each exposure, the samples were observed and color changes were noted.</p> <p>Color changes corresponding to different gamma radiation doses were observed in all samples. In all responses, the grand jean texture of the liquid crystals was restrained suggesting that the energy that was absorbed did not induce any chemical change. However, observed color changes indicated 'unwinding' of the pitch of the helical conformation for the TM74A-based formulation (Mixtures A and B) and 'winding' for the Canola-based liquid crystals (Mixture C). The application of liquid crystals in dosimetry was determined due to the color changes.</p>	<p>The study showed an antibiotic substance was obtained from the parotid secretions of a toad (<i>Bufo marinus</i>). This was isolated by extraction with methanol and initial purification by thin-layer and gravity column chromatography using aqueous methanol in varying concentrations as solvent. The crude extract was assayed on three test microorganisms (<i>Escherichia coli</i>, <i>Bacillus subtilis</i> and <i>Aspergillus niger</i>). Commercial antibiotics (Streptomycin and Penicillin) were used as controls to compare the potency of the compound. All test organisms were inhibited by the isolated compound, showing similar potency as that of the control antibiotics.</p> <p>Out of 30 fractions that were obtained from the gravity column chromatography only fractions 27-30 inhibited bacteria but not fungi, although at the initial experimentation, the crude extract, revealed effective inhibition against <i>Aspergillus niger</i>, a fungal test microorganism. Further purification of the active fractions using high performance liquid chromatography (HPLC) with aqueous methanol yielded a compound with retention time of 3.74 minutes. The compound was collected and assayed on the same test microorganisms. The active compound inhibited <i>E. coli</i> and <i>B. subtilis</i> at 30 and 40 mm, respectively. Infra Red (IR) spectrometry revealed amine, alkene and alkyl halides as functional groups. These spectrometric data revealed a trace of peptide spectra suggesting that the antibiotic principle is peptide-like molecule. Bioassay of this compound demonstrated a comparable degree of antibiotic potency as that of streptomycin and penicillin with maximum inhibition of 45 mm in <i>B. subtilis</i> and 34 mm in <i>E. coli</i>.</p>

**Enclosure No. 5 to DepEd Memorandum No. 149, s. 2012**

**Data for Submission to BSE by the RCs**

This should be in **Excel spreadsheet** and sent to email address: [ampyventura@gmail.com](mailto:ampyventura@gmail.com) and [j\\_jacob@yahoo.com](mailto:j_jacob@yahoo.com) on **12 October 2012**. Please take note of the sample below:

Region: \_\_\_\_\_

Division: \_\_\_\_\_

No.	First Name	Middle Name	Last Name	Grade	High School	Gender	Team / Individual	Team Code	Research Adviser
1	Dona Vel	C.	Lagurin	10	Bayugan Nat'l Compre HS, Bayugan City	F	Individual	—	Jonathan f. Garzon
2	*Venessa Anne Kimberly	M.	Gealan	10	CARAGA RSHS, Surigao City	F	Team	1	Maria Ruth Edradan
3	*Queenee Lavern	G.	Pongcol	10		F	Team	1	
4	*Ivy Jean	J.	Turno	10		F	Team	1	
5	Bianca	A.	Muñez	10	Bunawan NHS, Agusan del Sur Bunawan NHS, Agusan del Sur Bunawan NHS, Agusan del Sur	F	Team	2	Jennyvi H. Papellero
6	Farrah Leah	U.	Ebe	10		F	Team	2	
7	El Veena Grace	A.	Rosero	10		F	Team	2	
8	Bryll Jay	I.	Salazar	9	Agusan del Sur NHS, Agusan del Sur	M	Individual	—	Emy S Dacoseo
9	Lea	S.	Aparente	10	Bayugan Nat'l Compre HS, Bayugan City	F	Team	3	Jonathan F. Garzon
10	Jayson Rey	R.	Vicariato	10		M	Team	3	
11	Justin Ryan	S.	Togonon	10		M	Team	3	

Prepared by \_\_\_\_\_ Mobile No. \_\_\_\_\_

School/Office Address and Phone No.: \_\_\_\_\_

Regional Coordinator: \_\_\_\_\_

**Note:**

1. **Team code number** is used to indicate the number of teams that joined the Division STF and the member of each team.
2. Include all the schools that participated in the Division STF.
3. Insert an *asterisk* before the first name of students who are qualified to join the National STF.
4. Insert an *asterisk* before the school name whose student-proponents are in the Special Science Classes (Cluster 2) of S & T Oriented High Schools (ESEP).

2013 National Science and Technology Fair  
**Scientific Review of STF Project Write-up**

Fair Division: Life Science  Physical/Applied Science:   
 Cluster 1:  Cluster 2:   
 Category: Individual:  Team:

Level: National  
 Venue:  
 Date:

Instruction: Please put a check  on appropriate box and write recommendations on the space provided

Project Code No.	Recommendations
Completed forms, signature and dates (to be verified by the Science Fair Secretariat ) <input type="checkbox"/> complete <input type="checkbox"/> incomplete	
Evidence of use of reference materials <input type="checkbox"/> adequate <input type="checkbox"/> inadequate <input type="checkbox"/> needs certification/data book	
Evidence of proper laboratory supervision <input type="checkbox"/> adequate <input type="checkbox"/> inadequate <input type="checkbox"/> needs certification/data book	
Use of accepted research techniques <input type="checkbox"/> adequate <input type="checkbox"/> inadequate <input type="checkbox"/> needs certification/data book	
Use of pathogenic organisms, hazardous substances and devices/disposal of wastes <input type="checkbox"/> Proper <input type="checkbox"/> Improper	
Status of investigatory project <input type="checkbox"/> original concept of study (does not violate intellectual property rights) <input type="checkbox"/> with innovation <input type="checkbox"/> Research Plan <input type="checkbox"/> with violation found <input type="checkbox"/> Project Data book <input type="checkbox"/> needs changes/improvement	
Over-all evaluation of project <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved	

**CERTIFICATION**

This is to certify that the above project was reviewed by the National Level S & T Fair Scientific Review Committee.

\_\_\_\_\_  
 SRC Member Printed Name and Signature

\_\_\_\_\_  
 SRC Member Printed Name and Signature

\_\_\_\_\_  
 SRC Member Printed Name and Signature

Date Reviewed/Approved/Disapproved \_\_\_\_\_