

Republic of the Philippines

Department of Education

REGION I SCHOOLS DIVISION OF THE CITY OF BATAC

DIVISION MEMORANDUM

1 8 NOV 2024

No. 476, s. 2024

2024 REGIONAL SCIENCE AND TECHNOLOGY FAIR (RSTF)

To: Assistant Schools Division Superintendent Chief Education Supervisors

Public and Private Elementary and Secondary School Heads

All Others Concerned

The Department of Education, Regional Office I (DepEd RO1), through the Curriculum and Learning Management Division (CLMD), announces the conduct of the 2024 Regional Science and Technology Fair (RSTF) on December 6-7, 2024 at the National Educators Academy of the Philippines- Region I (NEAP-R1), San Vicente, City of San Fernando, La Union.

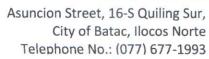
2. The 2024 RSTF aims to:

- a. promote Science and Technology consciousness and a culture of innovation among the youth and identify the most creative and innovative student researchers from the Junior and Senior High School who will represent the region to the 2024-2025 National Science and Technlogy Fair
- b. integrate the cultivation of crucial research skills such as critical thinking, problem-solving, and the stimulation of innovation and creativity; and
- c. propel academic success and prepare learners for excellence in their future academic pursuits and careers.
- The official participants in this activity are the Education Program Supervisors (EPS) in charge of Science and Mathematics, judges, observers (maximum of five [5] observers per SDO), research advisers/coaches, and student researchers who qualified through the regional preliminary evaluation or Scientific Review Committee (SRC) evaluation of their Science Investigatory Project (SIP) write-ups during the scheduled paper evaluation.
- Relative to this, the top two winners (First Placers and Second Placers) of the Science Investigatory Projects per category from the 2024 Division Science and Technology Fair shall submit three (3) hard copies of write-ups and one (1) USB per project/category to the Schools Division Office on or before November 20, 2024.
- For this year's RSTF, no registration fee shall be charged to participants. However, meals, accommodation, travel, and incidental expenses related to this activity shall be charged to local funds, subject to the usual accounting and auditing procedures. Student researchers and coaches are advised to secure their own accommodation. Reservation at NEAP-R1, San Vicente, City of San Fernando, will be on a first-come, first-served basis.
- This memorandum serves as the Official Authority to Travel for all participants.
- Attached is Regional Memorandum No. 1519, s. 2024 for reference.















ANSELMO R. ALUDINO Schools Division Superintendent

Encl.: as stated Reference: RM 1519, s. 2024 To be included in the <u>Perpetual Index</u> Under the following subject:

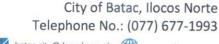
CONTESTS INNIVATIONS MATHEMATICS ROBOTICS RESEARCH SCIENCE

CID-GOL/DM-2024 Regional Science and Technology Fair $2416828/4243/November\ 15,\ 2024$









Asuncion Street, 16-S Quiling Sur,







Republic of the Philippines Department of Education

REGION I



REGIONAL MEMORANDUM No. 1510 s. 2024

2024 REGIONAL SCIENCE AND TECHNOLOGY FAIR (RSTF)

To: Schools Division Superintendents

The Department of Education, Regional Office 1 (DepEd RO1), through the Curriculum and Learning and Management Division (CLMD), announces the conduct of the 2024 Regional Science and Technology Fair (RSTF) on December 6-7, 2024 at the National Educators Academy of the Philippines -Region 1 (NEAP-R1), San Vicente, City of San Fernando, La Union.

The 2024 RSTF aims to:

a.) promote Science and Technology consciousness and a culture of innovation among the youth and identify the most creative and innovative student researchers from the Junior and Senior High Schools who will represent the region to the 2024-2025 National Science and Technology Fair (NSTF);

b.) integrate the cultivation of crucial research skills such as critical thinking, problem-solving, and the stimulation of innovation and creativity; and

c.) propel academic success and prepare the learners for excellence in their future academic pursuits and careers.

Relative to this, the following is the schedule of activities:

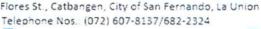
Relative to this, the following is the schedule of a	
Activity	Date/Schedule
School Level Preparations	Sept. 1- Nov. 20, 2024
Division Level Competition	November 21-22, 2024
Submission of Entries (First Placers & Second Placers per category) to the Regional Level	November 25, 2024
Regional Paper Evaluation (SRC Screening)	November 30, 2024
Regional Science and Technology Fair	December 6-7, 2024
Submission of Entries for the National Level (SRC)	December 20, 2024

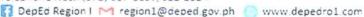
- The official participants to this activity are the Education Program Supervisors (EPSs) In-Charge of Science and Mathematics, Judges, Observers (maximum of five (5) observers per SDO), Research Advisers / Coaches, and Student-Researchers who qualified in the regional preliminary evaluation/Scientific Review Committee (SRC) evaluation of their Science Investigatory Project (SIP) write-ups during the agreed schedule of paper evaluation.
- For this year's RSTF, no registration fee shall be charged from each participant. However, meals, accommodation, travel and incidental expenses relative to the conduct of this activity of the participants shall be charged against local funds subject to the usual accounting and auditing procedures. Student-researchers and coaches are advised to look for their own accommodation. Reservation at NEAP R1, San Vicente, City of San Fernando, shall be first-come-first serve basis. For reservation at NEAP R1, contact Mrs. Marivic Rioveros, in-charge of accommodation through telephone number 072-6075813 or cp number 0966-8114051.















- 6. Other expenditures like certificates, honoraria of the Board of Judges (BOJs), materials and supplies, shall be charged against OSEC-1-24-0736, OSEC-1-23-5570, and Regional MOOE.
- 7. The deadline of submission of the top two (2) winning entries per category (three hard copies of write-ups and one (1) usb per project) from the Schools Division Offices (SDOs) to DepEd Regional Office for the regional paper evaluation (SRC-Scientific Review Committee screening) shall be on November 25, 2024 at 5PM.
- 8. The registration and setting-up of exhibit (Project Display Poster) shall start from 10am to 8pm of December 6, 2024. Opening Program shall start at 8am of December 7, 2024.
- 9. Corresponding service credits shall be granted to the Research Advisers/Coaches in accordance with DepEd Order No. 53, s. 2003 and Compensatory Time-Off (CTO) shall be given to the supervisors/non-teaching personnel as stated in CSC and DBM Joint Circular No. 2, s. 2004.
- 10. Complete Science and Technology Fair Guidelines, Mechanics, Activities and Requirements are stipulated in the NSTF Handbook.
- 11. For further inquiries, all concerned may contact the Curriculum and Learning Management Division (CLMD) at telephone number (072) 682-2324 local 120.
- 12. Attached is the List of the Regional Technical Working Group, and the Mechanics and Guidelines of the 2024 Regional Science and Technology Fair (RSTF).
- 13. Immediate dissemination of this Memorandum to all concerned is enjoined.

For the Regional Director:

RHODA T. RAZON Director III

Encl.: As Stated

Reference: DepEd Memo 068, s. 2023
To be indicated in the <u>Perpetual Index</u>
Under the following subjects:

CONTESTS

MATHEMATICS

ROBOTICS

INNOVATIONS

RESEARCH

SCIENCE

CLMD/jdcjr/rap/RM_2024RegionalScienceAndTechnologyFair November 12, 2024



2024 REGIONAL SCIENCE AND TECHNONOLGY FAIR (RSTF) Regional Technical Working Group (RTWG)

Overall Chairman: Arlene A. Niro, Chief, CLMD Coordinators: Jaime D. Campos, Jr., EPS, Science Rica A. Perez, EPS, Mathematics

*Registration, Attendance, Certificates, Awards and Documentation

- 1. Niňa Marie C. Ballada, CLMD
- 2. Bryan J. Mendoza, CLMD
- 2. Glory Gil R. Habelito, CLMD
- 3. Krystal G. Perez, CLMD
- 4. Arabell B. Autriz, CLMD
- 5. Irish Ione M. Ignacio, ORD-ICT Unit
- 6. Manuel M. Tanguilig, QAD

*Stage & Hall Preparation & Accomodation

- 1. Marivic Rioveros
- 2. NEAP R1 Personnel

*Facilitators (Life Sciences -Individual and Team Categories)

- 1. Flenie A. Galicinao, EPS, Laoag City
- 2. Rajah Adib G. Reyes, EPS, Ilocos Norte
- 3. Cynthia B. Tablang, EPS, Alaminos City
- 4. Eddie Raguindin, EPS, Pangasinan 2

*Facilitators (Physical Sciences -Individual and Team Categories)

- 1. Fatima Jimeno, EPS, Ilocos Sur
- 2. Geraldine Sunday Ortal Lao-at, OIC, Batac City
- 3. Peter John A. Frial, EPS, Vigan City
- 4. Nancy Hoggang, EPS, San Fernando City

*Facilitators (Robotics & Intelligent Machines -Individual & Team Categories)

- 1. Jay Ganacias, EPS, Candon City
- 2. Cherry A. Cayabyab, EPS, Dagupan City
- 3. Rominel S. Sobremonte, EPS, La Union
- 4. Jackelyn R. Aguinaldo, EPS, CLMD

*Facilitators (Science Innovation Expo -Individual and Team Categories)

- 1. Elmo S. Bernardino, EPS, Urdaneta City
- 2. Juliet Resngit, EPS, San Carlos City
- 3. Jerry R. Junio, EPS, Pangasinan1
- 4. Rodolfo B. Ligawad, Jr., EPS, CLMD

*Facilitators (Mathematics & Computational Sciences -Individual & Team)

- 1. Rica A. Perez, EPS, CLMD, DepEd RO1
- 2. Education Program Supervisors In-Charge of Mathematics

Mechanics and Guidelines of the Regional Science and Technology Fair (Science Investigatory Project Competition)

- 1. This competition is open to all Grade 9-12 students from both Public and Private Schools.
- 2. The five (5) main categories are: a) Life Science, b) Physical Science, c) Robotics & Intelligent Machines, d) Mathematics & Computational Science, and e) Science Innovation Expo (Inventions).
- 3. The first-place and second-place winning entries from each Schools Division Office (SDO) shall be submitted to the Regional Office on or before November 25, 2024 at 5PM for preliminary evaluation with the following requirements:

a) Three (3) hard copies of write-ups placed in A4 size bond papers and a short folder following the Project Code (to be printed in black pentel pen at the upper left corner of every folder) and color of short folders to be used as specified below:

Category of Investigatory Project	Project Code	Color of Folder
1)Life Science -Individual	LS-I-	Green
2)Life Science -Team	LS-T-	Yellow
3)Physical Science -Individual	PS-I-	Navy Blue
4)Physical Science -Team	PS-T-	Light/Sky Blue
5)Robotics & Intelligent Machines -Individual	RIM-I-	Pink
6)Robotics & Intelligent Machines -Team	RIM-T-	Brown
7)Mathematics & Computational Sciences -Ind	MCS-I-	Red
8) Mathematics & Computational Sciences - Team	MCS-T-	Purple
9)Science Innovation Expo -Individual	SIE-I-	Black
10)Science Innovation Expo -Team	SIE-T-	White

*Every team category shall consist of 2-3 student-researchers. There should only be one(1) teacher-coach per category.

In writing the code of the investigatory project write-up, the following additional letters are to be added and strictly be followed as to the name of Schools Division Office specified below:

Schools Division Office (SDO)	Letter Code
1) Alaminos City	AC
2) Batac City	BC
3) Candon City	CC
4) Dagupan City	DC
5) Ilocos Norte	IN
6) Ilocos Sur	IS
7) Laoag City	LC
8) La Union	LU
9) Pangasinan 1	P1
10) Pangasinan 2	P2
11) San Carlos City	SC
12) San Fernando City	SF
13)Urdaneta City	UC
14)Vigan City	VC

Examples: For Individual Category: LS-I-AC
For the Team Category: LS-T-AC

b) Soft copies of all the files of the write-up in PDF format should be placed in a USB Flashdrive with a main folder following a folder filename format:

SDO_ProjectCode (Example: Alaminos_City_LS-I)

*Inside the main folder, create two sub-folders. The first sub-folder should contain the Body of the research with a filename -SDO_ProjectCode_Body (Example: Alaminos_City_LS-I-Body). The second sub-folder should contain all the forms with a filename -SDO_ProjectCode_Forms (Example: Alaminos_City_LS-I-Forms).

- 4. The Complete Parts of Investigatory Project Write-up (arranged from top to bottom)
 - A. For Life Science, Physical Science, Robotics & Intelligent Machines

*Title Page and Table of Contents

Part 1. Required Forms For All Researches

- 1. Checklist For Adult Sponsor (1) (2024 ISEF Form)*
- 2. Student Checklist 1a.*
- 3. Research Plan
 - A. Rationale
 - B. Research Question Or Problem
 - C. Hypothesis
 - D. Goals/ Expected Outcomes
 - E. Research Methods/ Procedures/ Risk & Safety
 - F. Bibliography
- 4. Approval Form 1b (For All Students)*
- 5. Abstract
- Part 2. Additional Required Forms (Do not include the Form if it is not applicable)
 - Regulated Research Institutional or Industrial Setting Form (1C)*
 - 7. Qualified Scientist Form (2)*
 - 8. Risk Assessment Form (3)*
 - 9. Human Participants Form (4)*
 - 10. Vertebrate Animal Form (5A)*
 - 11. Vertebrate Animal Form (5B)*
 - 12. Potentially Hazardous Biological Agents Risk Assessment Form (6A)*
 - 13. Human and Vertebrate Animal Tissue Form (6B)*
 - 14. Human and Vertebrate Animal Tissue Form (6B)*
 - 15. Continuation/Research Progression Projects Form (7)*
- Part 3. Research Paper (Observe IMRAD Format)
 - 1. Cover Page
 - 2. Introduction
 - 3. Methodology
 - 4. Results
 - 5. Discussion
 - 6. Limitations On The Research Design & Material
 - 7. Conclusions, Recommendations, Notes, Works Cited And Appendices/ Bibliography & Pictorials
- Part 4. Research Abstract (Maximun 250 Words)
- Part 5. Research Logbook -Narrates the Events/Activities that the Researcher Experienced Before, During and After the conduct of the Research Project. The good notes show consistency and thoroughness to the judges and will help the researcher when writing the research paper. Data tables are recorded with accuracy. The date is recorded with the particular activity being done in the research study.

-This is the concrete evidence of the conduct of the research study.

- *Curriculum Vitae (Researcher)
- *Curriculum Vitae (Research Adviser/Coach)
- *If a winning entry, attach the Evaluation Forms of SRC (Regional SRC, National SRC) Note: ISEF Forms* can be downloaded at the link; societyforscience.org/isef

B. For Mathematics and Computational Sciences Paper Format

Part 1 and Part 2, follow the parts from Life Science, Physical Science, Robotics & Intelligent Machines.

Part 3 - The Body of the Write-up

- 1. INTRODUCTION What is your research question?
- Explain what is known or has already been done in your research area. Include a brief review of relevant literature.
- If this is a continuation project, a brief summary of your prior work is appropriate here. Be sure to distinguish your previous work from this year's project.

2. FRAMEWORK - What is your framework?

- Introduce the concepts and notation needed to specify your research question, methods, and results precisely.
- Define relevant terms, and explain prior/background results. (Novel concepts developed as part of your project can be presented here or in Section 4, as appropriate.)
- 3. FINDINGS What are your findings and supporting arguments?
- What did you discover and/or prove? Describe your result(s) in detail. If possible, provide both formal and intuitive/verbal explanations of each major finding.
- Describe your methods in general terms.
- Present rigorous proofs of the theory results or, if the arguments are long, give sketches of the proofs that explain the main ideas.
- For numerical/statistical results, include tables and figures that illustrate your data.
 Include relevant statistical analysis. Were any of your results statistically significant?
 How do you know this?
- 4. CONCLUSIONS What is your assessment of your findings?
- How do the results address your research question? And how have you advanced your readers' understanding relative to what is already known?
- Discuss possible limitations. Did any questions or problems arise that you were not expecting? What challenges do you foresee in extending your results further?
- What application(s), if any, do you see for your work?

5. REFERENCES—What are your sources?

- This section should not exceed one page. Limit your list to the most important references.
- List the references/documentation used which were not of your own creation (i.e., books, journal articles).
- Your reference list should be written based on the Chicago Manual of Style. For more
 information, you may visit the websites below:
 - http://www.chicagomanualofstyle.org/home.html
 - http://www.calvin.edu/library/knightcite/index.ph

C. For Science Innovation Expo Paper Format

Part 1 and Part 2, follow the parts from Life Science, Physical Science, Robotics & Intelligent Machines.

Part 3 - The Body of the Writeup

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:

- 1) Features and Specifications This describes the details of your invention.
- 2) Market Trends and Opportunities This part of the report must include three items: what inspired you to develop this invention, an explanation of what problem your invention will solve, and describe in detail how you determined that the invention that you created did not already exist. Explain what products are already on the market that are somewhat like your invention and describe how yours differs.
- c) Materials and Methods: Describe in detail how you made your invention. Explain what materials were used and how you put them together to make your invention. Your report should be detailed enough so that someone would be able to repeat the steps and make your invention. Directions on how to use the invention are also necessary here. You must include a detailed drawing(s) of your invention.
- d) Results and Discussion: This is the essence of your paper. Compare your results with theoretical values, published data, literature and related studies, commonly held beliefs, and/or expected results. Include a discussion of possible errors, statistics, graphs, pages with your raw collected data, etc. 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: This discusses the potential applications, possible customer benefits, and the impact of the problem in solving problems and issues of today and tomorrow.
- g) Acknowledgements: This part gives credit to those who have assisted you, including individuals, businesses and educational or research institutions.
- h) References/Bibliography: Your reference list should be written based on the Chicago Manual of Style (CMOS),
- 5. Science investigatory project write-ups which were qualified by the Board of Judges during the regional paper evaluation (SRC screening) shall be the official entries for the Regional Science and Technology Fair to be held on December 6-7, 2024 at NEAP-R1, Brgy. San Vicente, City of San Fernando, La Union. Each qualified project must have a Display Poster with dimensions of 67" x 34" (portrait style) using photopaper.
- 6. The Board of Judges in the regional paper evaluation (SRC screening) and in the regional level Science and Technology Fair shall evaluate the qualified Science Investigatory Projects based on the following criteria for judging:

Garage and	
Impact of Investigatory Project to the Community-	25%
Originality, Creativity & Inventiveness-	25%
Thoroughness, Accuracy & Completeness of Write-up-	25%
Presentation-	25%
Total	100%

- 7. During the RSTF, there shall be an oral presentation (with PowerPoint presentation) within 3-5minutes by the student-researchers to the board of judges. A 3-5minute question and answer portion with the board of judges shall follow right after the oral presentation.
- 8. The top five (5) winners together with their coaches in each category will receive certificates of recognition. The Best Presenter and the Best Display Poster per category shall also be awarded with certificates of recognition.