

**Republic of the Philippines**  
**Department of Education**  
 REGION X – NORTHERN MINDANAO  
**SCHOOLS DIVISION OF EL SALVADOR CITY**

November 12, 2024

DIVISION MEMORANDUM  
 NO. 442, s. 2024

**2024 REGIONAL SCIENCE AND TECHNOLOGY FAIR**

To: Assistant Schools Division Superintendent  
 Chief Education Supervisors  
 Education Program Supervisors  
 All Public Secondary School Heads  
 Teachers  
 All Others Concerned

- In reference to the Regional Memorandum No. 860 s. 2024 Regional Science and Technology Fair, this Office announces the conduct of the activity on November 25 – 26 at Cagayan de Oro City National High School – Junior High School, Nazareth, Cagayan de Oro City.
- The official participants for the 2024 Regional Science and Technology Fair are the following:

CATEGORY	RESEARCH PROJECT TITLE	Student Researcher	Coach	School
<b>Life Science Individual</b>	Bioactive Compounds of <i>Imperata cylindrica</i> as Potential Therapeutic for Cancer	Sandy Jane C. Nob	Phoebe Joy M. Pacut-Lopez  Christine Heazel O. Francisco	Cogon National High School
<b>Life Science Team</b>	Antimicrobial Efficacy of <i>Averrhoa carambola</i> leaf extract against Gram-positive and Gram-negative bacterial strains	Angel Mae A. Magnetico  Cielo B. Erestingcol  Jhanhia Mhie S. Bonayog	Grace M. Bermudez	Hinigdaan National High School
<b>Physical Science Individual</b>	Assessing the Performance of Banana Peel Extracts as an Eco-Friendly Floor Wax Alternative	Kristine P. Cajilla	Rheza Mae P. Ebal	Molugan National High School




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CATEGORY	RESEARCH PROJECT TITLE	Student Researcher	Coach	School
<b>Physical Science Team</b>	Improving Coconut Honey: Effect of Kalamansi ( <i>Citrofortunella macrocarpa</i> ) Extract on Sucrose Recrystallization During Cold Storage	Harris Kim B. Palasan Trisha A. Burton Nikko John A. Carcallas	Dexby P. De Guzman	El Salvador City National High School
<b>Mathematics and Computational Sciences Individual</b>	Optimizing Route and Traffic Flow in Barangay Cogon: A Strategic Plan for Livestock Auction Days	Jhairus James M. Abang	Liza May Duran-Nob	Cogon National High School
<b>Mathematics and Computational Sciences Team</b>	Identification of Suitable Solid Waste Collection Points through the GIS Approach in Barangay Cogon, El Salvador City	Geomark B. Pana Blare Dashel M. Decinilla Jenny B. Rabina	Liza May Duran-Nob	Cogon National High School
<b>Robotics and Intelligent Machines Individual</b>	Automatic Wet and Dry Waste Segregation System	Aurish Joy Vecino	Nemelie P. Ral	Molugan National High School
<b>Robotics and Intelligent Machines Team</b>	GAS SAFE PRO: Advanced Arduino Powered LPG Leak Detection with Real-Time Auto Shut-off System	John Clyde F. Eran Ellah R. Daluperi Diana Mae E. Castillon	Giovanni A. Magayan	Molugan National High School
<b>Science Innovation Expo Individual</b>	<i>Colocasia esculenta</i> as a Sustainable Biomaterial: A Viable Alternative to Traditional Leather	Maricris D. Uy	Marife P. Nuñez Marites T. Jariolne	Cogon National High School
<b>Science Innovation Expo Team</b>	Banana Pseudo-Stem Reinforced Recycled Polyethylene Roof Tiles	Ralph Ivhan James O. Clarabal Mary Rose A. Mericuelo Camille G. Baguio	Dexby P. De Guzman	El Salvador City National High School



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**SCHOOLS DIVISION OF EL SALVADOR CITY**

3. All entries are to submit their soft copies to [mariejade.cacayan@deped.gov.ph](mailto:mariejade.cacayan@deped.gov.ph) on or before November 15, 2024 following the guidelines of the National Science and Technology Fair handbook downloadable at <https://bit.ly/R10NSTFHandbook> and attach its attachments (e.g. INTEL-ISEF Forms and logbooks) for Preliminary Screening.
4. The participants' food, accommodation, travel and other incidental expenses shall be charged against division/school MOOE/ local funds while food and accommodation of the TWG shall be charged to the Regional Office and Central Office (CO) funds, subject to the usual accounting and auditing rules and regulations.
5. Participation to this activity shall be subject to the non-disruption of classes policy stipulated in **DepEd Order No. 9, s.2005** titled **Instituting Measure to Increase Engaged Time on Task and Ensuring Compliance therewith**.
6. This Office shall adhere to Equal Opportunity Principle (EOP) in the steps undertaken for this purpose. Hence, all decisions and actions shall be based on guidelines set forth, with no discrimination on the account of age, gender, identity, sexual orientation, civil status, disability, religion, ethnicity or political affiliation.
7. This Office directs the immediate and wide dissemination of this Memorandum.

  
**RANDOLPH B. TORTOLA**  
 Schools Division Superintendent

Encl.: As stated  
 Reference: Reginal Memorandum No. 860, 2024  
 To be indicated in the Perpetual Index  
 under the following subjects:

EXHIBITS          SCIENCE EDUCATION

RE: 2024 Regional Science and Technology Fair

CID/mjac



**Address:** Zone 3, Tuburan, Poblacion, El Salvador City

**Telephone Nos.:** (088) 882-6326

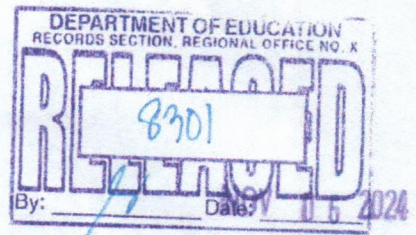
**Email Address:** [elsalvador.city@deped.gov.ph](mailto:elsalvador.city@deped.gov.ph)

**Website:** [depedelsalvadorcity.net](http://depedelsalvadorcity.net)

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Republic of the Philippines  
**Department of Education**  
 REGION X - NORTHERN MINDANAO



24-118581

November 6, 2024

REGIONAL MEMORANDUM  
 No. 860, s. 2024

**2024 REGIONAL SCIENCE AND TECHNOLOGY FAIR**

To: Schools Division Superintendents  
 Assistant Schools Division Superintendents  
 All Others Concerned

1. Following the **DepEd Unnumbered Memorandum** titled **National Science and Technology Fair for School Year 2024-2025**, this Office announces the conduct of the 2024 RSTF with the theme **Towards a Shared Vision: Exploring the Future for a Better Tomorrow** at Cagayan de Oro City National High School – Junior High School, Nazareth, Cagayan de Oro City, on November 25-26.

2. The activity aims to empower the youth and cultivate innovation and creativity and showcase competence of the learners in addressing community problems for sustainable development and to maximize their potentials of being inquisitive and creative in dealing with real life problems.

3. The RSTF 2024 features two contests:

**TUKLAS-A Research Project Fair:** A STEM research competition that provides opportunities for Junior and Senior High School learners to showcase their research projects based on their field of interest and/or real- world problems, issues, and concerns.

**INNOVATION EXPO-GAWAD AgLiTekno:** A Technology Innovation competition which aims to recognize the most creative and market viable project addressing major issues in food safety, water conservation, renewable energy, cyber security, road safety, health, disaster mitigation, agriculture, and environment.



Address: DepEd Regional Office X, Zone 1, Upper Baiulang, Cagayan de Oro City  
 Telephone No: (088) 881-3137  
 Email Address: region10@deped.gov.ph  
 Website: r10.deped.gov.ph

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Contest	Categories	Subcategories	No. of participants	Adviser
TUKLAS-A Research Project Fair	Life Science	Individual	1	1
		Team	2-3	1
	Physical Science	Individual	1	1
		Team	2-3	1
	Robotics and intelligent Machines	Individual	1	1
		Team	2-3	1
Mathematics and Computational Science	Individual	1	1	
	Team	2-3	1	
INNOVATION EXPO-GAWAD AgLiTekno	Individual		1	1
	Team		2-3	1

4. Attached are the Guidelines on the Conduct of 2024 RSTF and the Timeline of Activities for reference.
5. An SDO-made link containing all the entries must be submitted to nick.panares@deped.gov.ph on or before November 18, 2024. Each entry and its attachments (e.g. INTEL-ISEF Forms and logbook) must be enclosed in a folder.
6. Folder and file naming conventions in page 41 of the NSTE Handbook must be followed.
7. First, second, and third places will be declared as winners during the awarding program to be conducted immediately after the competition. Only the first placers will be endorsed to the Central Office for the NSTF SY 2024-2025. Medals (for the winners), and certificates (for all students and coaches) will be awarded as well.
8. All entries must be submitted with an accomplished Review and Recommendation Report found in page 43 of the NSTF Handbook.
9. Late and /or incomplete submission of entries and its required attachments (as indicated in Checkpoints for SRC Review in page 31) will cause an automatic disqualification.
10. Research paper formats (page 23 and 30), List of Forms and Documents Required for Submission in All Levels of Competition (page 35), Innovation Expo Screening Form (page 36), Innovation Expo Judges Form (page 37), Project Evaluation Form or Criteria (page 50), and parts for the Research Poster are found in the NSTF Handbook downloadable at <https://bit.ly/R10NSTFHandbook>.
11. A separate memorandum will be issued for the top 5 qualifiers in each category from the initial screening, who will advance to the Regional Science and Technology Fair (RSTF) for the actual validation, showcasing, and screening of their projects.



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12. The participants' food, accommodation, travel and other incidental expenses shall be charged against division/school MOOE/local funds while food and accommodation of the TWG shall be charged to Regional Office (RO) and Central Office (CO) funds, subject to the usual accounting and auditing rules and regulations.

13. For questions and clarifications, please contact Nick C. Pañares, Education Program Supervisor at [nick.panares@deped.gov.ph](mailto:nick.panares@deped.gov.ph).

14. This Office directs the immediate and wide dissemination of this Memorandum.

  
**DR. ARTURO B. BAYOCOT, CESO III**  
Regional Director

ATCH.: As stated  
To be indicated in the Perpetual Index  
under the following subjects:

EXHIBITS            SCIENCE EDUCATION

RE: National Science and Technology Fair for School Year 2024-2025

CLMD/nick



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## 2024 REGIONAL SCIENCE AND TECHNOLOGY FAIR

### GUIDELINES IN THE CONDUCT OF 2024 RSTF

(Reference: School, Division, Regional, and National Science and Technology Fair Guidebook, First Edition)

The procedures for the competition are as follows:

1. The competition is open to Grades 9-12 learners of both public and private high schools in Region 10.
2. Learners may work individually or in teams with 2-3 members from the same school. Each learner is only allowed to submit one (1) research project in one (1) of the four (4) research categories: Life Science, Physical Science, Robotics and Intelligent Machines, and Mathematics and Computational Sciences. The project should include no more than 12 months of continuous research and should not include research activities performed before January of the previous school year. (e.g., For the school year 2024-2025 with the target opening of classes on July 2024 and ISEF on May 2025, research projects may be accomplished within 1-12 month/s starting from January 2024 to January 2025).
3. The winners in each category of TUKLAS and Innovation Expo in the Division Science and Technology Fair (DSTF) will be screened by the Regional Scientific Review Committee (RRC) via online submission and evaluation of projects through necessary documents and attachments based on the complete guidelines for judging the competition.
4. In addition to item number 3, a video with a span of 3 to 5 minutes must also be submitted for further validation showcasing the process of the Innovation Expo or Tuklas Project with highlights on the research output.
5. The top 5 qualifiers of each category from the initial screening will advance to the Regional Science and Technology Fair (RSTF) for the actual validation, showcasing, and screening of the project. First placers in each category in the Regional Science and Technology Fair (RSTF) will advance to the National Science and Technology Fair (NSTF).
6. Participation in this activity is voluntary and no registration fee will be collected.



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2024 REGIONAL SCIENCE AND TECHNOLOGY FAIR

**Timeline of Activities**

Activity	Date	Responsible Office / Unit
Online Orientation of Regional Technical Working Group (RTWG) and All Science EPSs	November 15, 2024	CLMD
Online Submission of Official Participants per SDO	November 18, 2024	CLMD
Online Submission and Preliminary Screening of Division Entry for Each Contest Category	November 18, 2024	CLMD and RRC
Announcement of Qualified Entry for the Regional Science and Technology Fair	November 22, 2024	CLMD
Online Solidarity Meeting between RTWG and the Coaches	November 22, 2024	CLMD
Regional Science and Technology Fair	November 25-26, 2024	CLMD
Final Revision of Winning Entry and Other Requirements	November 27 – December 10, 2024	OSDS, CID, and CLMD
Submission of Results and Reports to BCD, DepEd CO NSTF	December 12, 2024 March 10 14, 2025	CLMD BCD



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