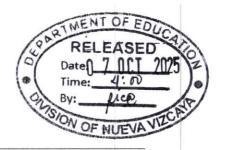


Department of Education

Region II – Cagayan Valley Schools Division of Nueva Vizcaya



07 October 2025

DIVISION BULLETIN No. __08___, s. 2025

FINALISTS FOR THE DIVISION SCIENCE, TECHNOLOGY & MATHEMATICS FAIR 2025

To: Assistant Schools Division Superintendent
Chief Education Supervisors
Education Program Supervisors
Public Schools District Supervisors/District In-Charge
Private & Public Secondary School Heads
All Others Concerned

- 1. The Schools Division Office of Nueva Vizcaya, through the Curriculum Implementation Division, announces the Top 5 finalists for the 2025 Science, Technology, & Mathematics Fair on October 10, 2025, at Dupax del Sur National High School, Dupax del Sur, Nueva Vizcaya.
- 2. Enclosed is the List of the Top 5 Finalists per category. Participants must adhere to the issued mechanics and guidelines for the Science Congress as per issued division memorandum. However, participants who joined the elimination round may attend and observe the conduct of the science congress.
- 3. Meals and snacks, traveling, and other incidental expenses relative to the preparation and conduct of the science investigatory projects/researches of participants shall be charged to the school MOOE or any local funds while all other expenses relative to the conduct of the fair shall be charged to the Provincial Special Education Fund 2025 subject to the usual auditing and accounting rules and regulations.
- 4. Immediate dissemination of this memorandum is desired

ORLANDO E. MANUEL PhD, CESO V

Schools Division Superintendent

10-2025-09







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Department of Education

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2025 SCIENCE, TECHNOLOGY & MATHEMATICS FAIR TOP 5 FINALISTS- SCIENCE CONGRESS

PHYSICAL SCIENCE -INDIVIDUAL

CODE	RESEARCH PROJECT TITLE	SCHOOL	DISTRICT
PSI-06-01	Ecobag Synthesis from Banana Pseudostem (Musa Spp.) and Gmelina Arborea Leaves: A Sustainable Waste-To-Product Approach	Carolotan High School	Dupax del Sur
PSI-06-02	Utilizing Photosynthetic Power using Bio-Photovoltaics (BPV) from Bryum Caespiticium (Bryum Moss)	Nueva Vizcaya General Comprehensive High School	Bayombong I
PSI-06-03	Development of a Smart-Activated Stove Control System	Saint Mary's University JHS & SHS	Bayombong I
PSI-06-04	Luminous flux in Radiation Shielding Optical Systems	Lamo National High School	Dupax del Norte I
PSI-06-05	Rheological Dynamics and Interfacial Performance Optimization of Rice Starch Binder Systems: A Sustainable Architectonics Approach	Aritao National High School	Aritao I

PHYSICAL SCIENCE -TEAM

CODE	RESEARCH PROJECT TITLE	SCHOOL	DISTRICT
PST-06-01	Sustainable Shine: Evaluating the Efficacy of Dragon Fruit (Hylocerrus Undatus) peel and Ipil-Ipil (Leucaena Leucephala) leaves as Eco-friendly Floor Wax Alternative	Alfonso Castañeda National High School	Alfonso Castañeda
PST-06-02	HYDRORIDE: An Oxyhydrogen-Powered Motorcycle Through Electrolysis for an Eco-friendly Transportation	Bagabag National High School	Bagabag
PST-06-03	GALING: The Amalgam Bio-Based Plastic Rooting Toward Biocompatible Substitution	Lamo National High School	Dupax del Norte I
PST-06-04	Utilization of Plant-Based Anthocyanin Extract for pH Sensing Biofilms in Spoilage Detection	Nueva Vizcaya General Comprehensive High School	Bayombong I
PST-06-05	Comparative Study of the Wound Healing Properties and Dermatological Assessment of Tamarind (Tamarindus Indica) Seed And Leaf Extract In Cream Formulation	Saint Mary's University Junior & Science Hs	Bayombong I







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2025 SCIENCE, TECHNOLOGY & MATHEMATICS FAIR TOP 5 FINALISTS- SCIENCE CONGRESS

LIFE SCIENCE -INDIVIDUAL

CODE	RESEARCH PROJECT TITLE	SCHOOL	DISTRICT
LSI-06-01	Encapsulated Powderized Neem Plant (Azadirachta indica), Papaya Seed (Carica papaya) and Basil Essential Oil (Ocimum basilicum) as a Mosquito Biolarvicide	Bagabag National High School	Bagabag
LSI-06-02	Maximizing Lettuce Productivity through Aquaponics with Mozambique Tilapia Waste	Bambang National High School	Bambang I
LSI-06-03	Postharvest Preservation of Cabbage (Brassica oleracea) through the Antimicrobial Properties of Guava (Psidium guajava) Leaf Crude Extract: Toward Sustainable Bio-Preservation	Dupax del Sur National High School	Dupax del Sur
LSI-06-04	ACME-Rs IBF	Nueva Vizcaya General Comprehensive HS	Bayombong
LSI-06-05	Evaluating Banana Peel Extract as a Sustainable Nutrient Source for a Hybrid Multi- Layered Aquaponics System	Solano High School	Solano I

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CODE	RESEARCH PROJECT TITLE	SCHOOL	DISTRICT
LST-06-01	Larvicidal Activity, Cytotoxicity, Morphological and Behavioral Effects of Ipil-Ipil (Leucaena Luecocephala) Leaf Crude Extract on Aedes Aegypti Larvae: Eco-Friendly Vector Control	Dupax del Sur National High School	Dupax del Sur
LST-06-02	PROJECT SATSUMA: Secondary Metabolites Analysis, Cytotoxicity Testing and Antifungal Screening of Citrus Reticulata (Satsuma) Peels Extract Utilized as Mitigation Application on Post-Harvest Solanum Lycopersicum (Tomato) Against Geotrichum Candidum (SOUR ROT)	Nueva Vizcaya General Comprehensive High School	Bayombong I
LST-06-03	Germination and Growth of Palay (Oryza Sativa) to different Organic Nutrient Priming Solutions	Paniki High School	Bagabag
LST-06-04	Isolation of Endophytic Fungus Extracted from Washington Navel Orange (Citrus Sinensis) Leaves: Its Polyethylene Biodegradation Agent Potential	Saint Mary's University JHS and SHS	Bayombong
LST-06-05	Evaluation of Basella Alba (Alugbati) on the Weight gain of Chicks in 35 days	Solano High School	Solano I







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2025 SCIENCE, TECHNOLOGY & MATHEMATICS FAIR **TOP 5 FINALISTS- SCIENCE CONGRESS**

ROBOTICS -INDIVIDUAL

CODE	RESEARCH PROJECT TITLE	SCHOOL	DISTRICT
RI-06-01	AGRICARE: Automated Ground robotics for Intelligent Crop Analysis and Resource Enhancement	Dupax Del Sur National High School	Dupax del Sur
RI-06-02	RAVEN: Robotics Assisted Vehicle for Emergency Navigation as a Disaster-Response Prototype	Nueva Vizcaya General Comprehensive High School	Bayombong I
RI-06-03	Autonomous Irrigation Rover for Smart Soil Hydration	Lamo National High School	Dupax del Norte I
RI-06-04	The GRASS System: Gardening Robot Assistant for Sustainability and Statistics	Saint Mary's University JHS & SHS	Bayombong
RI-06-05	Smart Ultrasonic Faucet: An Arduino-Based Control System for Water Conservation in Public School Restrooms	Solano High School	Solano II

ROBOTICS - TEAM

CODE	RESEARCH PROJECT TITLE	SCHOOL	DISTRICT
RT-06-01	RoboRake: Solar-powered Automated Robotic Rake for Efficient Rice Grain	Bambang National High	Bambang I
100-01	Drying	School	
RT-06-02	iTrash: Innovative Technology for Waste Reduction through Automated	Dupax Del Sur National High	Dupax del Sur
R1-00-02	Segregation and Compaction powered by Harnessed solar-energy	School	
RT-06-03	CROPTECH AGRIBOT: Robotic Planter for Precision Planting	Lamo National High School	Dupax del Norte I
RT-06-04	Project CYGNET: Community Yield Ground and Geohazard Navigation for	Nueva Vizcaya General	Bayombong I
R1-06-04	Emergency Technology	Comprehensive High School	
RT-06-05	Internet of Things (IoT)-Based Smart Precision Agriculture (ISPA): Automated	Solano High School	Solano II
	Control System with Real-Time User Monitoring		







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2025 SCIENCE, TECHNOLOGY & MATHEMATICS FAIR **TOP 5 FINALISTS- SCIENCE CONGRESS**

INNOVATION EXPO INDIVIDUAL

CODE	RESEARCH PROJECT TITLE	SCHOOL	DISTRICT
IEI-06-01	Bioseed Paper: Development of a Biodegradable Banana Pseudostem Fiber Matrix Embedded with Capsicum Frutescence Seed Germination and Sustainable Seedling Growth.	Aritao National High School	Aritao I
IEI-06-02	DALOY-Device for Agricultural Lift and Optimization using Yield from the sun	Bambang National High School	Bambang I
IEI-06-03	PASPAS Insect Killer: An Eco-Friendly Multi-Insecticide from Mahogany (Swietenia Macrophylla) Leaves	Dupax Del Sur National High School	Dupax del Sur
IEI-06-04	ECO-COIR: Eco-Efficient Coconut Coir Composite with Starch Biopolymer for Biodegradable Coasters	Nueva Vizcaya General Comprehensive High School	Bayombong I
IEI-06-05	Household Online Security and Monitoring (HOSAM) 2.0	Solano High School	Solano II

INNOVATION EXPO TEAM

CODE	RESEARCH PROJECT TITLE	SCHOOL	DISTRICT
IET-06-01	BAO paint: Coconut Shells Clay Paint for Carbon Emissions Adsorption	Bagabag National High School	Bagabag I
IET-06-02	Developing and Testing of Physalis peruviana as an Anti-bacterial Healing Balm	Bintawan National High School	Villaverde
IET-06-03	NAVI-AID (Navigation Assistive Intelligence Device): An Enhanced Assistive Device with Multi-Modal Alserts for Safer Navigation of the Visually Impaired	Lamo National High School	Dupax del Norte I
IET-06-04	From Clove to Craft: Innovating Green Paper and Packaging Materials using Allium Sativum (Garlic) Skins	Nueva Vizcaya General Comprehensive High School	Bayombong I
IET-06-05	EMCHARGE: Empowering Mobility: Charging and Hard Drive Analysis for Reliable Gear Enhancement	Solano High School	Solano II







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2025 SCIENCE, TECHNOLOGY & MATHEMATICS FAIR TOP 5 FINALISTS- SCIENCE CONGRESS

MATHEMATICS AND COMPUTATIONAL SCIENCES - TEAM

CODE	RESEARCH PROJECT TITLE	SCHOOL	DISTRICT
MCST-01	Data Analysis of Tomato Prices in Nueva Vizcaya: Modeling and Forecasting	Bambang NHS	Bambang I
MCST-02	Through Time Series Analysis A Multiple Linear Regression Approach for Modeling Monthly Rainfall Amount	Bintawan NHS	Villaverde
MCST-03	using Meteorological Predictors in Nueva Vizcaya, Philippines. Mathematical Model of Final Energy Consumption and Primary Energy Supply in the Philippines: Time-Series Forecasting	Murong Agri-Fishery School (formerly Murong NHS)	Bagabag I
MCST-04	Analysis of Unemployment Rate in the Philippines: Trends, Forecasting, and Relationship with Selected Macroeconomic Variables	NVGCHS	Bayombong I
MCST-05	Pharmacological Kinetics of Devil's Horsewhip (Achyranthes aspera) Leaf Extract: Quantitative Analysis of Brine Shrimp Lethality Over an 18-Hour Period.	Saint Mary's University – JHS & SHS	Bayombong I

MATHEMATICS AND COMPUTATIONAL SCIENCES-INDIVIDUAL

CODE	RESEARCH PROJECT TITLE	SCHOOL	DISTRICT
MCS-I-01	Math Meets Agriculture: A Mathematical Forecast of Rice land Availability in the Philippines	Bintawan National High School	Villaverde
MCS-I-02	Mathematical Model of Yellow Corn Production in the Municipality of Dupax del Norte	Lamo National High School	Dupax del Norte I
MCS-I-03	Mathematical Model of Rice Production in the Philippines	Murong Agri-Fishery School	Bagabag I
MCS-I-04	Forecasting Electricity Consumption in the Philippines (2005-2024): A Time- Series Analysis with Real Gross Domestic Product and Population Growth Rate	Nueva Vizcaya General Comprehensive High School	Bayombong I
MCS-I-05	Enrollment Forecasting through Mathematical Modeling Based on Dropouts, Completers and Classroom Availability at Solano High School	Solano High School	Solano II







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