



Republic of the Philippines  
Department of Education  
NATIONAL CAPITAL REGION  
SCHOOLS DIVISION OFFICE OF MUNTINLUPA CITY

Office of the Schools Division  
Superintendent

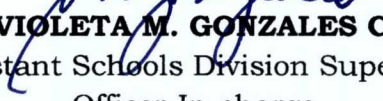
OCT 15 2025

**MEMORANDUM**

**RECOGNITION OF WINNERS IN THE 2025 DIVISION SCIENCE TECHNOLOGY  
AND MATHEMATICS FAIR**

To: Assistant Schools Division Superintendent  
Chief Education Supervisor, Curriculum Implementation Division  
OIC-Chief Education Supervisor, School Governance and Operations Division  
Public Elementary and Secondary School Heads/OICs  
All Others Concerned

1. This Office recognizes and congratulates the trainers, parents, and school heads of learners in the 2025 Division Science Technology and Mathematics Fair with the theme: "Harnessing the Unknown: Powering the Future through Science Innovation" held last October 08, 2025-Wednesday from 8:00am-5:00pm at Muntinlupa Science High School, Muntinlupa City.
2. Attached is the list of winner-participants.
3. Immediate and wide dissemination of this Memorandum is desired.

  
**VIOLETA M. GONZALES CESO VI**  
Assistant Schools Division Superintendent  
Officer-In-charge  
Office of the Schools Division Superintendent

Enclosure: As stated

Reference:

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

TEACHERS      LEARNERS      PROGRAMS      LEARNING DELIVERY

ABSO / RECOGNITION OF WINNERS IN THE 2025 DIVISION SCIENCE TECHNOLOGY AND MATHEMATICS FAIR

421/October 13, 2025

UN-2025-421



🏠 Student Center for Life Skills Bldg., Centennial Ave, Brgy. Tunasan, Muntinlupa City  
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✉ [sdo.muntinlupa@gmail.com](mailto:sdo.muntinlupa@gmail.com) / [sdo.muntinlupa@deped.gov.ph](mailto:sdo.muntinlupa@deped.gov.ph)  
🌐 [deped-muntinlupa.com](http://deped-muntinlupa.com)

**WINNERS OF THE DIVISION SCIENCE, TECHNOLOGY, AND MATHEMATICS FAIR 2025**

**LIFE SCIENCE – INDIVIDUAL CATEGORY**

<b>Research Title</b>	<b>Code</b>	<b>Researchers</b>	<b>Coach</b>	<b>School</b>	<b>Rank</b>
Gamma Ray Irradiation on Tomato ( <i>Solanum lycopersicum</i> ) Seeds for Off-season Tomatoes with Delayed Germination	LS-I-01	MIEL MARGARET MOLDEZ	MARK ARCHIE O. JAVIER	MSHS	3
<b><i>Gliricidia sepium</i> (Madre de Cacao) Leaf Extract for Ethanol-Induced Oxidative Sress-Mediated Neurodegeneration on the Locomotor Ability of <i>Drosophila melanogaster</i> (Fruit fly) as Model Organism</b>	<b>LS-I-02</b>	<b>ANDRE NIKOLAS T. DELA TORRE</b>	<b>CHANDLER ERICKSON A. CACHUELA</b>	<b>MSHS</b>	<b>1</b>
Morphological Responses of Third-Instant Wild-type <i>Drosophila melanogaster</i> Larvae to Gamma radiation and Vitamin C and E Antioxidant Supplementation	LS-I-05	CASSANDRA NICOLE B. DUMALAGAN	KRYSTEL D. DELOS REYES	MSHS	2

**LIFE SCIENCE – INDIVIDUAL CATEGORY BEST PRESENTER**

Morphological Responses of Third-Instant Wild-type <i>Drosophila melanogaster</i> Larvae to Gamma radiation and Vitamin C and E Antioxidant Supplementation	LS-I-05	CASSANDRA NICOLE B. DUMALAGAN	KRYSTEL D. DELOS REYES	MSHS
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**LIFE SCIENCE – INDIVIDUAL CATEGORY BEST DISPLAY BOARD**

<b><i>Gliricidia sepium</i> (Madre de Cacao) Leaf Extract for Ethanol-Induced Oxidative Sress-Mediated Neurodegeneration on the Locomotor Ability of <i>Drosophila melanogaster</i> (Fruit fly) as Model Organism</b>	<b>LS-I-02</b>	<b>ANDRE NIKOLAS T. DELA TORRE</b>	<b>CHANDLER ERICKSON A. CACHUELA</b>	<b>MSHS</b>
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**LIFE SCIENCE – TEAM CATEGORY**

Research Title	Code	Researchers	Coach	School	Rank
<b>Antidiabetic Activity of Sampinit (<i>Rubus rosifolius</i>) Leaf Extracts in Diabetic Zebrafish (<i>Danio rerio</i>) as Model Organism for Type 2 Diabetes</b>	LS-T-02	<b>CAPUNO, YSABELLE L.BANAAG, ETHAN JAN C. BENAVIDEZ, CHESED NATHANIEL A.</b>	<b>MARK ARCHIE O. JAVIER</b>	<b>MSHS</b>	<b>1</b>
Antihyperlipidemic Activity on Key Lipid Biomarkers of <i>Hibiscus rosa-sinensis</i> (Gumamela) on Diet-Induced Diabetic Silkworms ( <i>Bombyx mori</i> L.)	LS-T-03	KASHARA ANDREA G. HUBILLA ROSUEL ASLIE M. VALE JULIANA CELESTINA A. VENTURA	MARK ARCHE O. JAVIER	MSHS	3
Comparative Phytoremediation Efficiency of Water Hyacinth ( <i>Pontederia crassipes</i> ), Water Lettuce ( <i>Pistia stratiotes</i> ), and Duckweed ( <i>Lemna minor</i> ) in the Rhizofiltration of Copper (I) oxide (Cu <sub>2</sub> O)	LS-T-05	MARC S. BANQUE JR. JOHN NICHOLAS B. GAMENG GAE-A CHARM I. TANGSON	MARK ARCHE O. JAVIER	MSHS	2

**LIFE SCIENCE – TEAM CATEGORY BEST PRESENTER**

Antihyperlipidemic Activity on Key Lipid Biomarkers of <i>Hibiscus rosa-sinensis</i> (Gumamela) on Diet-Induced Diabetic Silkworms ( <i>Bombyx mori</i> L.)	LS-T-03	KASHARA ANDREA G. HUBILLA ROSUEL ASLIE M. VALE JULIANA CELESTINA A. VENTURA	MARK ARCHE O. JAVIER	MSHS
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**LIFE SCIENCE – TEAM CATEGORY BEST DISPLAY BOARD**

<b>Antidiabetic Activity of Sampinit (<i>Rubus rosifolius</i>) Leaf Extracts in Diabetic Zebrafish (<i>Danio rerio</i>) as Model Organism for Type 2 Diabetes</b>	<b>LS-T-02</b>	<b>CAPUNO, YSABELLE L.BANAAG, ETHAN JAN C. BENAVIDEZ, CHESED NATHANIEL A.</b>	<b>MARK ARCHIE O. JAVIER</b>	<b>MSHS</b>
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**PHYSICAL SCIENCE – INDIVIDUAL CATEGORY**

<b>Research Title</b>	<b>Code</b>	<b>Researchers</b>	<b>Coach</b>	<b>School</b>	<b>Rank</b>
<b>Comprehensive Performance Analysis of a Formulated Oxidized Corn starch (OCS) Additive to Magnesium Chloride (MgCl<sub>2</sub>)-Based Dust Supplement</b>	PS-I-02	<b>JUSTINE MARON ABELLA</b>	<b>CHANDLER ERICKSON A. CACHUELA</b>	<b>MSHS</b>	<b>1</b>
Solar Cell Activity of Combined Purple Sweet Potato (Ipomea batatas) Peels & Guava (Psidium guavaja) Leaves in the Production of Dye-Sensitized Solae Cell (DSSC) with Modified Candle Soot-Based Counter Electrode (CE)	PS-I-04	LJ MARCIEL ABRAHAM S .PEREZ	CHANDLER ERICKSON A. CACHUELA	MSHS	2
Synthesize and Characterization of Medium-Density Fiberboard Made from Pandan (Pandanus amaryllifolius) & Abaca (Musa textilis): an Interfiber Interaction and Mechanical Performance	PS-I-05	ATASHA ALEXANDRA Y. GADDI	CHANDLER ERICKSON A. CACHUELA	MSHS	3

**PHYSICAL SCIENCE – INDIVIDUAL CATEGORY BEST PRESENTER**

<b>Comprehensive Performance Analysis of a Formulated Oxidized Corn starch (OCS) Additive to Magnesium Chloride (MgCl<sub>2</sub>)-Based Dust Supplement</b>	PS-I-02	<b>JUSTINE MARON ABELLA</b>	<b>CHANDLER ERICKSON A. CACHUELA</b>	<b>MSHS</b>
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**PHYSICAL SCIENCE – INDIVIDUAL CATEGORY BEST DISPLAY BOARD**

Solar Cell Activity of Combined Purple Sweet Potato (Ipomea batatas) Peels & Guava (Psidium guavaja) Leaves in the Production of Dye-Sensitized Solae Cell (DSSC) with Modified Candle Soot-Based Counter Electrode (CE)	PS-I-04	LJ MARCIEL ABRAHAM S .PEREZ	CHANDLER ERICKSON A. CACHUELA	MSHS
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**PHYSICAL SCIENCE – TEAM CATEGORY**

<b>Research Title</b>	<b>Code</b>	<b>Researchers</b>	<b>Coach</b>	<b>School</b>	<b>Rank</b>
Coco-Solve: Potential of Coconut (Cocos nucifera L.) Husks Extract in Decalcifying Calcium Oxalate Monohydrate (COM) Crystals	PS-T-03	CYEIN B. GEDAYA KAYCEELYN P. AREVALO TRIXCIE MICHAELA V. JUBILAN	PRINCESS C. LA ROSA NICHOLE DEL MUNDO	MNHS	3
<b>Green Valorization of Rice (Oryza sativa L.) Husk-Based Biocomposites via Water-Based Diazonium Chemistry and Polyvinyl Alcohol (PVA) Cross Linking for Hydroponics System Substrate Application</b>	<b>PS-T-04</b>	<b>JOSHANE R. CARIÑO DEONEL A. MAGDARAOG ANCHILA BEATRICE P. PUNZALAN</b>	<b>CHANDLER ERICKSON A. CACHUELA</b>	<b>MSHS</b>	<b>1</b>
Innovative Bamboo Sutures: A Biodegradable and Sustainable Alternative with Biomedical Potential Evaluated Through Quantifiable Mechanical and Antimicrobial Testing	PS-T-05	ROXANNE SANDICO KASSANDRA NORRIE ROME O. DESCUTIDO PRINCESS BEA L. BARTOLOME	HAZEL JHOY DEL MUNDO	MNHS	2

**PHYSICAL SCIENCE – TEAM CATEGORY BEST PRESENTER AND BEST DISPLAY BOARD**

<b>Green Valorization of Rice (Oryza sativa L.) Husk-Based Biocomposites via Water-Based Diazonium Chemistry and Polyvinyl Alcohol (PVA) Cross Linking for Hydroponics System Substrate Application</b>	<b>PS-T-04</b>	<b>JOSHANE R. CARIÑO DEONEL A. MAGDARAOG ANCHILA BEATRICE P. PUNZALAN</b>	<b>CHANDLER ERICKSON A. CACHUELA</b>	<b>MSHS</b>
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**STEM INNOVATION EXPO-INDIVIDUAL CATEGORY**

<b>Research Title</b>	<b>Code</b>	<b>Researchers</b>	<b>Coach</b>	<b>School</b>	<b>Rank</b>
Mist-IQ: A Sustainable Vertical Aeroponics System with Real-Time Web Dashboard Monitoring	SIE-I-04	BRIANNA C. DUMANTAY	HAZEL JHOY DEL MUNDO	MNHS	2.5
<b>SEEDS: Smart Environmental and Efficient Dispersal Systems for Automated Dry Seeding and Soil Monitoring in Farming</b>	<b>SIE-I-05</b>	<b>ALEXIS GABRIEL C. CARIAGA</b>	<b>PRINCESS C. LA ROSA JOANNA NICHOLE DEL MUNDO</b>	<b>MNHS</b>	<b>1</b>
SennaCares: Anti-Inflammatory and Antifungal Properties of Formulated Akapulko ( <i>Senna alata L.</i> ) Leaf Extract Topical Cream for Vulvovaginal Candidiasis (VVC)	SIE-I-06	HANIFA ALECK A. CALSO	MARK ARCHEI O. JAVIER	MSHS	2.5

**STEM INNOVATION EXPO-INDIVIDUAL CATEGORY BEST PRESENTER AND BEST DISPLAY BOARD**

SennaCares: Anti-Inflammatory and Antifungal Properties of Formulated Akapulko ( <i>Senna alata L.</i> ) Leaf Extract Topical Cream for Vulvovaginal Candidiasis (VVC)	SIE-I-06	HANIFA ALECK A. CALSO	MARK ARCHEI O. JAVIER	MSHS
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**STEM INNOVATION EXPO-TEAM CATEGORY**

<b>Research Title</b>	<b>Code</b>	<b>Researchers</b>	<b>Coach</b>	<b>School</b>	<b>Rank</b>
NichroDry: Energy-Efficient Small-Scale Paddy Dryer with Nichrome Coil Heating Element and Innovative Rotating Cylindrical Drum Technology	SIE-T-03	LORD CEDRIC I. ALDANESE MIKE DANIEL D. GUIMAL JILLIAN ERNEST M. LANDRITO	CHANDLER ERICKSON CACHUELA	MSHS	3
PharmaAID: A Multimodal AI (Artificial Intelligence) and RAG (retrieval Augmented Generation) powered Robot for Reading and Interpreting Medical Prescriptions	SIE-T-04	JAMEIA ARMINDA SABINNE T. ARBOLADO ANGELO BOMBALES CARL G. FEDELINO	HAZEL JHOY DEL MUNDO	MNHS	2
<b>SENTINEL: Smart Evaluation Network for Tracking Infant's Needs and Environmental Level</b>	<b>SIE-T-05</b>	<b>JOHN REYN SANTINO R. VILLAESTER MARK LESTER A. RIVERA</b>	<b>PRICESS C. LA ROSA JOANNA NICHOLE DEL MUNDO HAZEL JHOY DEL MUNDO</b>	<b>MNHS</b>	<b>1</b>

**STEM INNOVATION EXPO-TEAM CATEGORY BEST PRESENTER AND BEST DISPLAY BOARD**

<b>SENTINEL: Smart Evaluation Network for Tracking Infant's Needs and Environmental Level</b>	<b>SIE-T-05</b>	<b>JOHN REYN SANTINO R. VILLAESTER MARK LESTER A. RIVERA</b>	<b>PRICESS C. LA ROSA JOANNA NICHOLE DEL MUNDO HAZEL JHOY DEL MUNDO</b>	<b>MNHS</b>
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**ROBOTICS AND INTELLIGENCE MACHINE- INDIVIDUAL CATEGORY**

<b>Research Title</b>	<b>Code</b>	<b>Researchers</b>	<b>Coach</b>	<b>School</b>	<b>Rank</b>
AQUAPORA: Automated Coral Health Assessment with AI Integration of the Coral Fluorescence Index (CFI)	RIM-I-01	KASHIEKA LOUISE R. AGUILAR	CHANDLER ERICKSON A. CACHUELA	MSHS	2
EGG-TECH: A Raspberry Pi-Powered Robotic System for Fertility Detection and Automated Sorting of Eggs	RIM-I-03	CLARENCE MACARAEG	HAZEL JHOY DEL MUNDO	MNHS	3
LIWANAG: Localized Inspection for Widespread Analysis of Neuropathy and Assessment of the Foot Guidance	RIM-I-04	<b>RALPH ZANTINO BAWA</b>	<b>PRINCESS C. LA ROSA JOANNA NICHOLE DEL MUNDO</b>	<b>MNHS</b>	<b>1</b>

**ROBOTICS AND INTELLIGENCE MACHINE- INDIVIDUAL CATEGORY BEST PRESENTER AND BEST DISPLAY BOARD**

LIWANAG: Localized Inspection for Widespread Analysis of Neuropathy and Assessment of the Foot Guidance	RIM-I-04	<b>RALPH ZANTINO BAWA</b>	<b>PRINCESS C. LA ROSA JOANNA NICHOLE DEL MUNDO</b>	<b>MNHS</b>
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**ROBOTICS AND INTELLIGENCE MACHINE – Team CATEGORY**

<b>Research Title</b>	<b>Code</b>	<b>Researchers</b>	<b>Coach</b>	<b>School</b>	<b>Rank</b>
GleeBot: Glucose Monitoring and Alerting Assistive Robot for Managing Diabetes	RIM-T-01	ELIZABETH DEENS BELMONTE FRANZ ANTIQUENA SAMUEL FERNANDEZ	PRINCESS C. LA ROSA JOANNA NICHOLE DEL MUNDO	MNHS	2
VANGUARDS: Vector-Mapping Alert Navigator with Gas Detection for Urgent Aid, Recue, Delivery and Search	RIM-T-03	<b>CHRISTIAN JAKE O. ZIPAGAN CHRISTINE ISABEL MANALO KIAN NATHAN MONTANO</b>	<b>MARILU RONQUILLO LORZANO</b>	<b>MSHS</b>	<b>1</b>
VENOM (Verse Entity in Negating the Overgrowth of Mosquitoes)	RIM-T-04	VIEL P. VALIN MARIA ALEGRIA S. AQUINO ZADIE RIANNE ANGELA R. BASCO	MARGARET V. DECLARO	MNHS	3

**ROBOTICS AND INTELLIGENCE MACHINE – Team CATEGORY BEST PRESENTER AND BEST DISPLAY BOARD**

VANGUARDS: Vector-Mapping Alert Navigator with Gas Detection for Urgent Aid, Recue, Delivery and Search	RIM-T-03	<b>CHRISTIAN JAKE O. ZIPAGAN CHRISTINE ISABEL MANALO KIAN NATHAN MONTANO</b>	<b>MARILU RONQUILLO LORZANO</b>	<b>MSHS</b>
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**MATHEMATICS AND COMPUTATIONAL SCIENCE – INDIVIDUAL CATEGORY**

<b>Research Title</b>	<b>Code</b>	<b>Researchers</b>	<b>Coach</b>	<b>School</b>	<b>Rank</b>
Antiproliferative and Chemopreventive Potential of Ulasiman Bato (Peperomia pellucida) Leaf Extract: An In Vivo Onion (Allium cepa) Root Tip Bioassay and In Silico Analysis Targeting COX-2 and CDK-2 Proteins	MCS-I-02	SEAN TRISTAN A. BAUTISTA	MARK ARCHIE O. JAVIER	MSHS	3
<b>Green-Synthesis of Zinc-Ferrite (ZnFe<sub>2</sub>O<sub>4</sub>) Nanoparticles from Samapaguita (Jasminum sambac) Extract: In Silico Evaluation of Angiosuppressive Potential via VEGFR-2, PI3K<math>\beta</math>, RAGE, EGFR Docking and Dynamics</b>	<b>MCS-I-03</b>	<b>SAMANTHA LUISA P. UMALI</b>	<b>MARK ARCHIE O. JAVIER</b>	<b>MSHS</b>	<b>1</b>
In Vitro and In Silico Analysis of Cytotoxicity and Anticancer Potential of Siling Haba (Capsicum annum va. Longum) Placental Region Extract Through Brine Shrimp Lethality Assay and Molecular Docking Against Survivin	MCS-I-04	CHENESSY N. SAMSON	MARK ARCHIE O. JAVIER	MSHS	2

**MATHEMATICS AND COMPUTATIONAL SCIENCE – INDIVIDUAL CATEGORY BEST PRESENTER AND BEST DISPLAY BOARD**

<b>Green-Synthesis of Zinc-Ferrite (ZnFe<sub>2</sub>O<sub>4</sub>) Nanoparticles from Samapaguita (Jasminum sambac) Extract: In Silico Evaluation of Angiosuppressive Potential via VEGFR-2, PI3K<math>\beta</math>, RAGE, EGFR Docking and Dynamics</b>	<b>MCS-I-03</b>	<b>SAMANTHA LUISA P. UMALI</b>	<b>MARK ARCHIE O. JAVIER</b>	<b>MSHS</b>
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**MATHEMATICS AND COMPUTATIONAL SCIENCE – TEAM CATEGORY**

<b>Research Title</b>	<b>Code</b>	<b>Researchers</b>	<b>Coach</b>	<b>School</b>	<b>Rank</b>
<b>Bee-Inspired Thermal Protection System: Thermo-Structural Analysis 30 Honeycomb Sandwich Panel Structure Using ANSYS</b>	<b>MCS-T-03</b>	<b>VINCENT GABRIEL P. ALVAREZ SOPHIA T. ODONZO VINCENT A. OPEDA</b>	<b>CHANDLER ERICKSON A. CACHUELA</b>	<b>MSHS</b>	<b>1</b>
GALAXY: Graph Analysis of Linked Zodiac Constellations via Centroids of Manhattan Voronoi Diagram Regions	MCS-T-04	CARL NATHAN ABANES AARON JAMES PAGAL JERLYN JOY TUAZON	JEFFREY DEL MUNDO	MNHS	2
Spatiotemporal Mathematical Modeling of Breast Cancer Tumor Growth Dynamics Under Varying Hypoxia Levels Using Logistics Growth Equation, Gompertz Model, and Michaelis-Menten Kinetics	MCS-T-05	LUCAS SANTINO P. GASPAR JEUZ KERVY S. FRANCO FRANCIS VINCEMT D. SORIANO	CHANDLER ERICKSON A. CACHUELA	MSHS	3

**MATHEMATICS AND COMPUTATIONAL SCIENCE – TEAM CATEGORY BEST PRESENTER AND BEST DISPLAY BOARD**

<b>Bee-Inspired Thermal Protection System: Thermo-Structural Analysis 30 Honeycomb Sandwich Panel Structure Using ANSYS</b>	<b>MCS-T-03</b>	<b>VINCENT GABRIEL P. ALVAREZ SOPHIA T. ODONZO VINCENT A. OPEDA</b>	<b>CHANDLER ERICKSON A. CACHUELA</b>	<b>MSHS</b>
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**Poster-Making Contest for Secondary Schools**

**1<sup>st</sup> Place:** Jamelarin Alisa Mionett

Poblacion National High School JHS

**2<sup>nd</sup> Place:** Mhars Laresma

Poblacion National High School SHS

**3<sup>rd</sup> Place:** Summer F. Mampusti

Muntinlupa Business High School Main