

2023 1st PHILIPPINE NUCLEAR SCIENCE OLYMPIAD

GUIDELINES AND MECHANICS

I. INTRODUCTION

The Department of Science and Technology – Philippine Nuclear Research Institute (DOST-PNRI) will spearhead the 51st Atomic Energy Week (AEW) on 4-7 December 2023 with the theme “Gear UP”. In accordance with Presidential Proclamation No. 1211 in 1973, this annual celebration aims to generate awareness among the Filipino people about the beneficial uses of nuclear science and technology. The celebration will focus on enhancing public awareness of breakthroughs in nuclear technology, and safety in undertaking activities involving radioactive materials. In line with the AEW celebration, PNRI will hold the **1st Philippine Nuclear Science Olympiad (PNSO)**.

The 1st PNSO is organized to provide a national venue for identifying and training potential participants who will represent the country at the 1st International Nuclear Science Olympiad (INSO) in 2024. This event will consist of screening and finals.

II. OBJECTIVES

The PNSO aims to:

- Encourage the improvement of nuclear science in the Philippines by stimulating interest in this field among students and teachers;
- Promote awareness, appreciation, and competence in nuclear science at the secondary level and enhance the advancement of nuclear science education in the country; and
- Identify talented students in nuclear science and further train them as competent participants in international nuclear science competitions.

III. PARTICIPATION FOR THE PNSO SCREENING

- The participants must be Filipino Junior and Senior High School students, Grades 9 to 12 from either public or private secondary school in the Philippines. The students must not be more than eighteen (18) years old and have not entered University by 07 August 2024 in preparation for the International Nuclear Science Olympiad (1st INSO)
- Registration Forms can be requested from the PNSO Committee or downloaded from the PNRI Website at: <https://pnri.dost.gov.ph/index.php/downloads/pnso>
- Accomplished registration forms may be submitted via email at pnso2023@pnri.dost.gov.ph & ntc@pnri.dost.gov.ph, or via courier to:
2023 PNSO Committee
Nuclear Training Center
PHILIPPINE NUCLEAR RESEARCH INSTITUTE
COMMONWEALTH AVENUE, DILIMAN, QUEZON CITY, METRO MANILA 1101
- Each participating school may nominate up to **three (3) students only**. Students should be endorsed by the Division Office of the Department of Education or by the school principal/head.
- The registration will start on 9 October 2023 and will end on 17 November 2023.

- The list of official participants selected by PNRI for the 2023 PNSO Screening will be posted on 22 November 2023 on the PNRI website and social media pages. Official participants will also be notified through the emails provided in the registration form.

IV. COVERAGE OF TEST QUESTIONS

The test questions will cover topics in the General Syllabus of the 1st International Nuclear Science Olympiad (INSO), which can be found in: <https://inso.science/index.php/the-olympiand/general-syllabus/>

- Structure of an atom and nucleus
- Radiation
- Fission & Fusion
- Radioactivity in the Environment
- History of Nuclear Science
- Risk and Safety
- Applications (Energy, Health, Industry/Agriculture, Environment)

V. MECHANICS

a. SCREENING

- Screening will be held on **5 December 2023 (Tuesday) 9:00 AM** during the 51st Atomic Energy Week Celebration at the Philippine Nuclear Research Institute (PNRI) Compound in Quezon City, Metro Manila.
- The screening will be administered as a **written examination** where ALL students compete individually. The written examination will be composed of 100 multiple-choice questions to be answered in two (2) hours. Not following instructions will invalidate the student's response(s) in part of the examination where violation(s) occurred.
- Results of the screening will be announced on **5 December 2023 (Tuesday) at 3:00 PM**.
- Participants are responsible for their transportation to the PNRI Compound for the PNSO.
- The **top 20 students** from the screening move forward to the Finals.

b. FINALS

- The Finals will be held on **6 December 2023 (Wednesday) 9:00 AM** at PNRI's Main Auditorium during the 51st Atomic Energy Week Celebration.
- The Finals will be administered as a written examination where the PNSO finalists will compete individually. The written examination will be composed of 130 multiple-choice questions to be answered in two (2) hours. Not following instructions will invalidate the student's response(s) in part of the examination where violation(s) occurred.
- The **top five (5) students** in the Finals, with approval of the PNSO Scientific Committee, will be declared as representatives of the Philippines to the 1st International Nuclear Science Olympiad to be held on 31 July – 7 August 2024.
- Awarding of winners will be held during the Closing Program of the 51st Atomic Energy Week Celebration.

VI. PRIZES

- a. All participating students will receive a certificate of participation, a PNSO token set, a technical tour of PNRI radiation and nuclear facilities during the 51st AEW Celebration and attend the AEW Technical session for a chance to participate in the lectures by acclaimed scientists.
- b. Each student who qualifies for the PNSO Finals will receive:
 - i. A PNSO 2023 souvenir shirt; and
 - ii. Meet and greet session with PNRI Career Scientists and get to know their fields in nuclear science and technology, their interests, and their journey to their scientist position.
- c. Grand Prizes for PNSO winners are as follows:
 - i. Top 5 students for Finals:
 1. 1st Place Cash Prize of Php 50,000.00 + Gold Medal + Certificate
 2. 2nd Place Cash Prize of Php 40,000.00 + Silver Medal + Certificate
 3. 3rd Place Cash Prize of Php 30,000.00 + Bronze Medal + Certificate
 4. 4th Place Cash Prize of Php 20,000.00 + Certificate
 5. 5th Place Cash Prize of Php 10,000.00 + Certificate
- d. The top 5 PNSO winners will be trained by researchers and scientists in preparation for the 1st International Nuclear Science Olympiad (INSO) to be held in the Philippines in 2024.

VII. OTHER MATTERS

- a. Like and follow the official PNRI Facebook page (<https://www.facebook.com/PNRIDOST>) for important announcements and updates about PNSO.
- b. Food and drinks will be served to all official participants and coaches during the conduct of the 2023 PNSO Screening and Finals in PNRI during the 51st AEW Celebration.
- c. Participants should arrive at the PNRI compound at least one (1) hour before the schedule of the screening and those who are qualified for the finals. This time will be allotted for on-site registration and group picture taking before the start of the competition. Participants should present their school IDs during the onsite verification.
- d. Writing materials and scratch papers will be provided for the students for the written examinations.
- e. Taking photos or videos during the screening and finals level is strictly prohibited. An official photographer will be present during the event.
- f. The officials of the PNSO shall have the right to disqualify any student who violates any item of the PNSO Guidelines and Mechanics.
- g. The results of the screening and final level will be final and not appealable.
- h. For inquiries regarding the registration, send an e-mail to the PNRI Nuclear Training Center (ntc@pnri.dost.gov.ph; pnso2023@pnri.dost.gov.ph).