



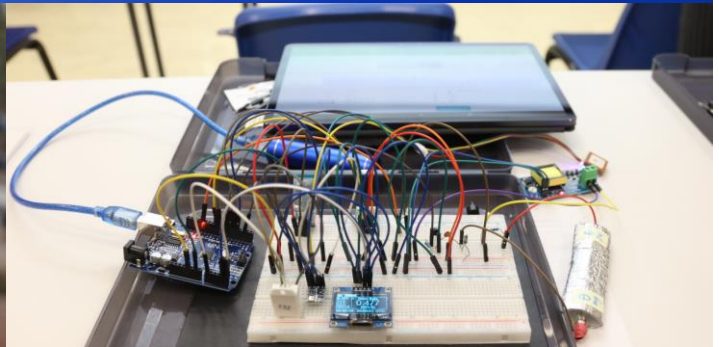
A3ENV001W

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Climate Radiation (Level III) :

Gamma-Go Robotics

The Hong Kong Observatory



Application Deadline
30 Oct 2023 12:00 noon

Result Release
6 Nov 2023

Intended Learning Outcomes

At the end of the workshop, students should be able to:

1. Connect radiation and meteorological microsensors on experimental circuit boards;
2. Conduct real-time gamma radiation and meteorological measurements;
3. Upload data to a dedicated network platform for analysis.

◆ Introduction

In our living environment, various forms of natural radiation are present, including radioactivity found in rocks, soil, cosmic radiation, and even in our food and drinks. Natural radiation constitutes approximately 80% of the radiation doses we experience in daily life. To detect and measure these radiations, the use of a suitable device is necessary. **Are you interested in constructing your own device? Would you like to comprehend the functioning of the detection component?**

In this workshop, members will gain knowledge about the fundamentals of radiation. Members will also participate in hands-on lessons, where they will learn how to install radiation detectors and meteorological microsensors on a breadboard. Additionally, they will assemble a kit to facilitate real-time, on-site measurements of gamma radiation, air temperature, humidity, and atmospheric pressure during practical sessions. Data collected will be uploaded to the dedicated web-based platform (Gamma-Go) for further analysis.

*Pre-recorded self-learning video will be sent to members around two weeks before the workshop. Members are required to watch the video before the session.

◆ Schedule

Session	Date	Time	Venue
1	22 Dec 2023 (Fri)	9:00 - 11:30 a.m.	HKAGE Room 403

◆ Target Participants

- S3 to S6 HKAGE student members in 2023/24 school year
- Class size: 30

Student members would be selected randomly by the computer system. The decision of HKAGE on the result of the selection should be final.

◆ Pre-requisite

No special prerequisites are needed

◆ Certificate

E-Certificate will be awarded to participants who have:

- attended the workshop; and
- performed well in the workshop

◆ Medium of Instruction

Cantonese with Chinese Handouts

