

Science in Action: Experiential Learning Activities on Testing and Certification Industry for Secondary Students (2024/25)

Aim / Objective

This is to invite secondary schools to participate in the captioned event.

Details

2. The Education Bureau (EDB), The Industry Training Advisory Committee for Testing and Certification Industry under Hong Kong Qualifications Framework (HKQF) and Hong Kong Council for Testing and Certification (HKCTC) jointly organise the “Science in Action: Experiential Learning Activities on Testing and Certification Industry for Secondary Students (2024/25)”. The activities of this event aim to enhance students’ understanding about the Testing and Certification (T&C) industry, potentially sparking their interest and aspiration in pursuing science study and considering further development in the T&C industry. Meanwhile, the activities also aim to facilitate teachers to better guide their students in life planning, in particular related to the articulation pathways in the T&C industry.

3. The activities include school talks, visits and student workshops. For details, please refer to Appendix 14a. Schools interested in arranging the activities for their students are requested to complete the respective application forms at Appendix 14b-e and return it by fax to Science Education Section, EDB (Fax no.: 2194 0670) on or before **10 January 2025 (Friday)**.

Contact Person

4. For enquiries, please contact Dr Matthew LI of the Science Education Section, EDB on 3698 3447.

Science in Action: Experiential Learning Activities on Testing and Certification Industry for Secondary Students (2024/25)

Details of the Activities

1. Introduction

“Science in Action: Experiential Learning Activities on Testing and Certification Industry for Secondary Students (2024/25)” is jointly organised by the Education Bureau (EDB), The Industry Training Advisory Committee for Testing and Certification Industry under Hong Kong Qualifications Framework (HKQF) and Hong Kong Council for Testing and Certification (HKCTC). With a key objective of introducing Testing and Certification (T&C) industry to secondary students and teachers, the activities are organised around the themes on food, clothing, housing and transport in relation to T&C and our daily living. These activities include (A) Student Workshop on Testing and Certification; (B) School Talk: Testing & Certification in Our Daily Living; (C) Student Activity: Visit to Laboratories / Organisations of Testing and Certification Industry; and (D) Professional Development Programme for Chemistry Teachers: Visit to Laboratories / Organisations of Testing and Certification Industry.

2. Aims

- To enhance teachers’ and students’ understanding about the latest development of the T&C industry, its career prospects and the articulation pathways;
- To facilitate teachers and students to appreciate the relevance of science study in secondary level to the T&C industry and thus our daily life and society;
- To encourage students to choose science subjects in senior secondary level; and
- To inspire students to commit to building solid basis of science knowledge and skills for further development in science-related career, especially in relation to the T&C industry.

3. Details of activities

Activity	Target Participants	Contents / Venue	Date
(A) Student Workshop on Testing and Certification	S5 students studying Chemistry	- Chemistry experiments - Introduction to degree programmes and career paths in T&C - Venue: Laboratory of Hong Kong Metropolitan University	Jun – Jul 2025
(B) School Talk: Testing & Certification in Our Daily Living	S3 students	- Sharing from T&C practitioners - Introduction to career prospects and articulation pathways of T&C industry - Venue: to be provided by the applicant school	Mar – May 2025

Activity	Target Participants	Contents / Venue	Date
(C) Student Activity: Visit to Laboratories / Organisations of Testing and Certification Industry	S4-S6 students studying Chemistry	- Guided tour to T&C related laboratories - Venue: TÜV Rheinland Hong Kong Limited / Public Works Central Laboratory, the Civil Engineering and Development Department	Feb & Apr 2025
(D) Professional Development Programme for Chemistry Teachers: Visit to Laboratories / Organisations of Testing and Certification Industry	Chemistry teachers	- Guided tour to T&C related laboratories - Venue: Lee Kam Kee Company Ltd. – Testing Laboratory / SGS Hong Kong Ltd.	Feb & May 2025

**Science in Action: Experiential Learning Activities on Testing and Certification Industry
for Secondary Students (2024/25)**

(A) Student Workshop on Testing and Certification

Application Form

(Deadline for application: 10 January 2025 (Fri))

Please return the completed application form on or before **10 Jan 2025 (Fri)** to Science Education Section, Education Bureau (Attn: Dr Matthew LI) by FAX (Fax no.: 2194 0670).

The information of our school participating in the **Student Workshop on Testing and Certification** is as follows:

No. of participating students (S5)[#]: _____

Workshop Schedule[#] (4 repeating sessions)

(Please ☒ as appropriate)	Time Slot	Date	Time	Priority (If more than one time slot are chosen, please indicate order of preference.) [1 – most preferred]
☐	A	23 June 2025 (Mon)	2:30 p.m. – 5:00 p.m.	
☐	B	25 June 2025 (Wed)		
☐	C	7 July 2025 (Mon)		
☐	D	8 July 2025 (Tue)		

Remarks:

- Target participants are **S5 students** studying Chemistry. Schools may nominate up to **25 students** to participate in a workshop.
- Applications will be processed on a first-come, first-served basis.
- This student workshop is free of charge. However, schools are responsible for arranging and covering the cost of transportation for students.
- All students and teachers must adhere to the safety guidelines provided by the laboratory staff during the workshop.
- The application results will be confirmed via email on or before **24 Jan 2025 (Fri)**.

Name of School : _____

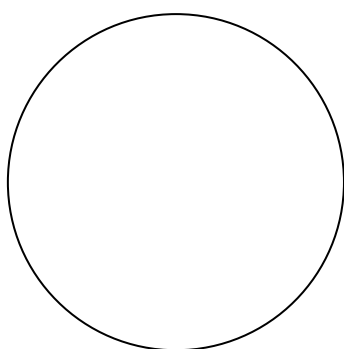
School Address : _____

School Tel. No. : _____ Fax No. : _____

Name of Teacher-in-charge : _____ (English) _____ (Chinese)

Contact No. of Teacher-in-charge : _____

E-mail Address of Teacher-in-charge : _____



School Chop

Name of Principal : _____

Signature of Principal : _____

Date : _____

Organisers:

教育局
Education Bureau

香港檢測和認證局
Hong Kong Council for Testing and Certification

資歷架構
Qualifications Framework

STUDENT WORKSHOP ON TESTING AND CERTIFICATION

Ignite Your Students' Passion for Chemistry!

Why Attend?

- **Hands-On Learning:** Practical chemistry experiments related to pharmaceuticals and nutrition supplements.
- **Real-World Applications:** Introduction to quality control and regulatory compliance in markets.
- **Further Study and Career Insights:** Introduction to bachelor programmes and exciting career paths in Testing and Certification.

Workshop Highlights:

- **Chromatography:**
See how substances are separated from a complex mixture.
- **Spectrophotometry:**
Understand how light is used to test product purity.
- **Mass Spectrometry:**
Find out how specific compound can be identified in a mixture.
- **Heavy Metal Detection:**
Detect metals in consumer goods.



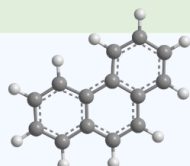
Event Details:

- **Date:** Late June to early July 2025
(4 repeating sessions)
- **Time:** 2:30 PM – 5:00 PM
- **Venue:** Hong Kong Metropolitan University
- **Target:** S.5 students taking chemistry
- **Capacity:** 25 students per workshop
(First-come, first-served)
- **Fee:** Free of charge



Certificate!

Students who complete the workshop will receive a Certificate of Participation.



**Science in Action: Experiential Learning Activities on Testing and Certification Industry
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(B) School Talk: Testing & Certification in Our Daily Living

**Application Form
(Deadline for application: 10 January 2025 (Fri))**

Please return the completed application form on or before **10 Jan 2025 (Fri)** to Science Education Section, Education Bureau (Attn: Dr Matthew LI) by FAX (Fax no.: 2194 0670).

Remarks:

- The talks can be arranged in the period of **March to May 2025**.
- Applications will be processed with consideration of the availability of the speakers and on a first-come, first-served basis.
- The talks target to Form 3 Students. Each school talk will normally last for **ONE hour**, delivered in a face-to-face mode and conducted in Cantonese.
- Participating schools shall provide a venue in their school campus to accommodate the desired number of participating students.
- Schools are responsible for the venue setup such as seats, microphones, a computer, a projector and a screen etc.
- The application results will be confirmed via email on or before **24 Jan 2025 (Fri)**.

Our school would like to arrange the following school talk(s):

Theme (Please ☒ as appropriate; you can select more than one.)	Date and time (Please write two possible dates and times: e.g. 23 May 2025, 2:15 pm – 3:15 pm)	No. of classes and students (e.g. 4 classes; 120 students)
☐ Theme 1: Getting to Know the Testing and Certification Industry: Food Testing	1st priority: _____ 2nd priority: _____	No. of classes: ____ No. of students: ____
☐ Theme 2: Getting to Know the Testing and Certification Industry: Textile & Garment Testing	1st priority: _____ 2nd priority: _____	No. of classes: ____ No. of students: ____

(B) School Talk: Testing & Certification in Our Daily Living – Application Form (Cont'd)

Theme (Please ☒ as appropriate; you can select more than one.)	Date and time (Please write two possible dates and times: e.g. 23 May 2025, 2:15 pm – 3:15 pm)	No. of classes and students (e.g. 4 classes; 120 students)
☐ Theme 3: Getting to Know the Testing and Certification Industry: Construction Materials Testing	1st priority: _____ 2nd priority: _____	No. of classes: ____ No. of students: ____

Name of School : _____

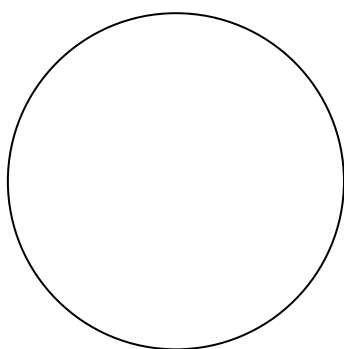
School Address : _____

School Tel. No. : _____ Fax No. : _____

Name of Teacher-in-charge : _____(English)_____ (Chinese)

Contact No. of Teacher-in-charge : _____

E-mail Address of Teacher-in-charge : _____



School Chop

Name of Principal : _____

Signature of Principal : _____

Date : _____

Organisers:

教育局
Education Bureau

香港檢測和認證局
Hong Kong Council for Testing and Certification

資歷架構
Qualifications Framework

SCIENCE IN ACTION

School Talk: Testing & Certification in Our Daily Living

(2024/25)

Talk Highlights:

- ✓ Share on Testing & Certification industries by corresponding practitioners.
- ✓ Inspire students to choose science subjects in future study.
- ✓ Suggest articulation pathways and career prospects within the T&C industry.



Theme 1

Getting to Know the Testing and Certification Industry:
Food Testing



Theme 2

Getting to Know the Testing and Certification Industry:
Textile & Garment Testing



Theme 3

Getting to Know the Testing and Certification Industry:
Construction Materials Testing

Date: Mar - May 2025

Duration: 1 Hour

Target: Form 3 students

Venue: At school

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**(C) Visit to Laboratories / Organisations of Testing and Certification Industry
for Students**

**Application Form
(Deadline for application: 10 January 2025 (Fri))**

Please return the completed application form on or before **10 Jan 2025 (Fri)** to Science Education Section, Education Bureau (Attn: Dr Matthew LI) by FAX (Fax no.: 2194 0670).

Our school would like to join the following visit(s):
(Please ☒ as appropriate; you can select more than one.)

☐ Visit to TÜV Rheinland Hong Kong Limited (Location: Tsuen Wan)

About the visit:

TÜV Rheinland is a German-based corporation established more than 150 years ago. It is one of the world's leading testing service providers which delivers a wide spectrum of testing and certification services to its clients.

During the visit, students will have the opportunity to learn more about the real environment of a commercial laboratory, and the adoption of different chemical testing techniques for a range of consumer products.

Date and time of visit (You can select more than one):

☐ 21 Feb 2025 (Fri), 2:30 pm – 4:00 pm

☐ 28 Feb 2025 (Fri), 2:30 pm – 4:00 pm

☐ Visit to Public Works Central Laboratory, the Civil Engineering and Development Department (CEDD) (Location: Kowloon Bay)

About the visit:

The Public Works Central Laboratory is part of the Public Works Laboratories (PWL) of CEDD. PWL provide an extensive range of materials testing services for the construction industry to ensure the quality of the construction materials used in public works meeting the stipulated standards.

During the visit, students will experience the real environment and the daily operation of a Government testing laboratory, and understand more about different testing methods adopted in construction materials testing.

Date and time of visit (You can select more than one):

☐ 15 Apr 2025 (Tue), 2:30pm – 4:30pm

☐ 30 Apr 2025 (Wed), 2:30pm – 4:30pm

Number of participating students: _____ **Level of students:** _____

Number of participating teachers: _____

Remarks:

- A visit will normally last for **1.5 to 2 hours**
- The visits target to S4-S6 students studying Chemistry. Schools may nominate up to **20 students** and **2 teachers** to participate in each visit.
- Applications will be processed on a first-come, first-served basis.
- The visits are free of charge. However, schools are responsible for arranging and covering the cost of transportation for students.
- All students and teachers must adhere to the safety guidelines provided by the laboratory staff during the visit.
- The application results will be confirmed via email on or before **24 Jan 2025 (Fri)**.

Name of School : _____

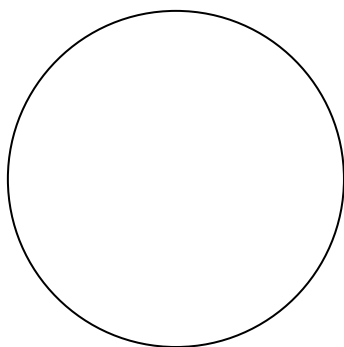
School Address : _____

School Tel. No. : _____ Fax No. : _____

Name of Teacher-in-charge : _____ (English) _____ (Chinese)

Contact No. of Teacher-in-charge : _____

E-mail Address of Teacher-in-charge : _____



School Chop

Name of Principal : _____

Signature of Principal : _____

Date : _____

**Science in Action: Experiential Learning Activities in Testing and Certification Industry
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**(D) Professional Development Programme for Chemistry Teachers: Visit to Laboratories /
Organisations of Testing and Certification Industry**

Chemistry teachers of secondary schools can apply for the following laboratory visits through Training Calendar System (TCS) #:

Course ID	Course content	Visiting venue	Date
CSD020250208	• Introduction to services of Testing and Certification (T&C) • Introduction to career prospects and articulation pathways of T&C industry • Guided tour to different laboratories	Lee Kam Kee Company Limited – Testing Laboratory (Location: Tai Po)	Feb 2025
		SGS Hong Kong Limited (Location: Fanling)	May 2025

The course of visits will be posted onto TCS in due course.