



College of Science

香港城市大學
City University of Hong Kong



Office of the Provost and Deputy President

香港城市大學
City University of Hong Kong



城大科學專利大挑戰

Information Session

20 September 2024



College of Science

香港城市大學
City University of Hong Kong



城大科學專利大挑戰

About the CityUHK Science Patent Challenge

Prof. Alex Wong
Associate Dean (Outreach & Internationalisation)
College of Science, CityU

About the Patent Challenge



- **Unconventional STEM Competition**

- Any scientific-technological inventions for the good of humanity
- Innovative enough to win patent protection

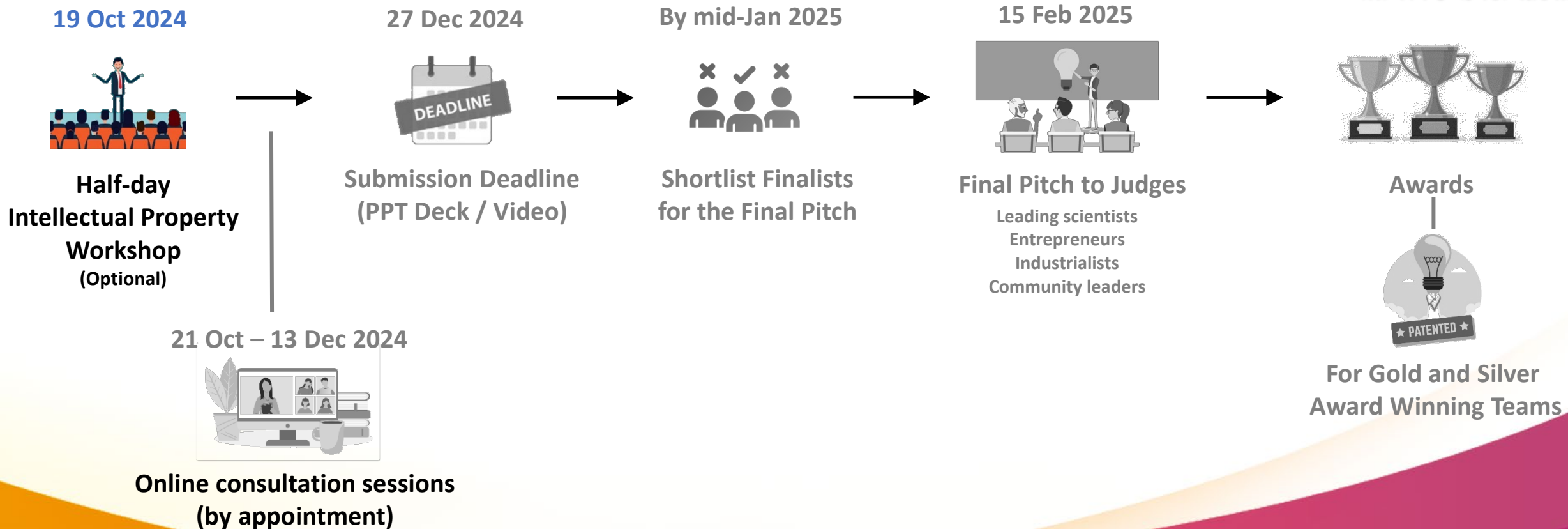
- **In line with our Global Research Enrichment And Technopreneurship (GREAT) programme**



- To nurture students who are interested in pursuing a career in scientific research or starting business ventures

- **Patent filing as an award → Be a Real Inventor!**

Patent Challenge – An Overview



Patent Challenge – An Overview



19 October 2024
(Saturday)



**Half-day
Intellectual Property Workshop
(Optional)**

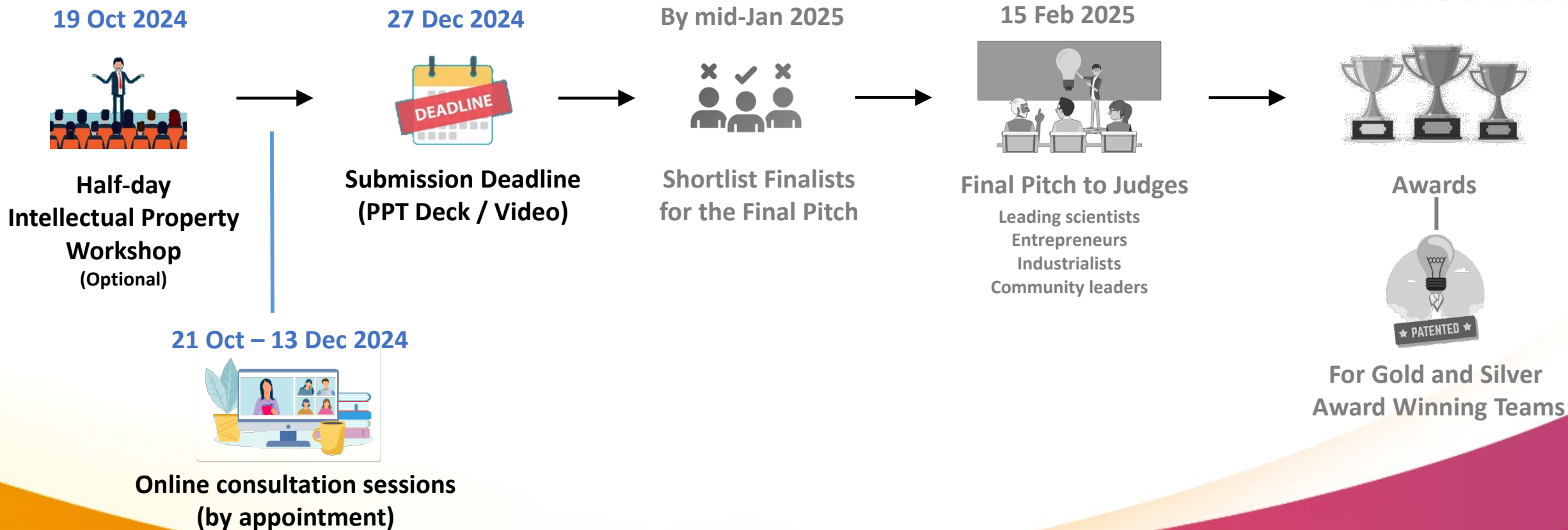


Online Registration Deadline: 11 October 2024 (Friday)



**Conducted in Cantonese,
Supplemented with English materials**

Patent Challenge – An Overview



Patent Challenge – An Overview



21 Oct 2024 – 13 Dec 2024



**Online consultation sessions
(by appointment)**



Online Registration Deadline: 6 December 2024 (Friday)



Via Zoom Meeting

Patent Challenge – Participation



- **School-based submission:** each school can submit **at most 2 entries**
- Each entry can be either on an **individual basis or team basis (8 students max per team)**; each entry should have **a mentor teacher**
- You still have time to decide the number of entries and team members (information provided in your submission **by 27 Dec 2024** is considered to be final)

About Your Invention



- Any **scientific-technological inventions** for the good of humanity
- Should be **innovative, scientifically sound & practical**
 - Innovation idea **SHOULD NOT BE published/submitted elsewhere before!!!**
- Production of Prototype is not necessary

Submitting Your Invention Idea



- The Mentor Teachers will submit the students' invention ideas in the format of:
 - a **PowerPoint deck (max. 20 slides)**, or a **Video (max. 5 min)**
 - Must be in **English**
- Each student and mentor has to sign an Agreement on Confidentiality

Suggested Content of Your Submission



- **Title of your invention**

- e.g. A rapid colorimetric nitrite detection method based on ruthenium complexes

- **Details and Contributions of each team member**

- Conceptualization, methodology, investigation, prototype fabrication, submission preparation

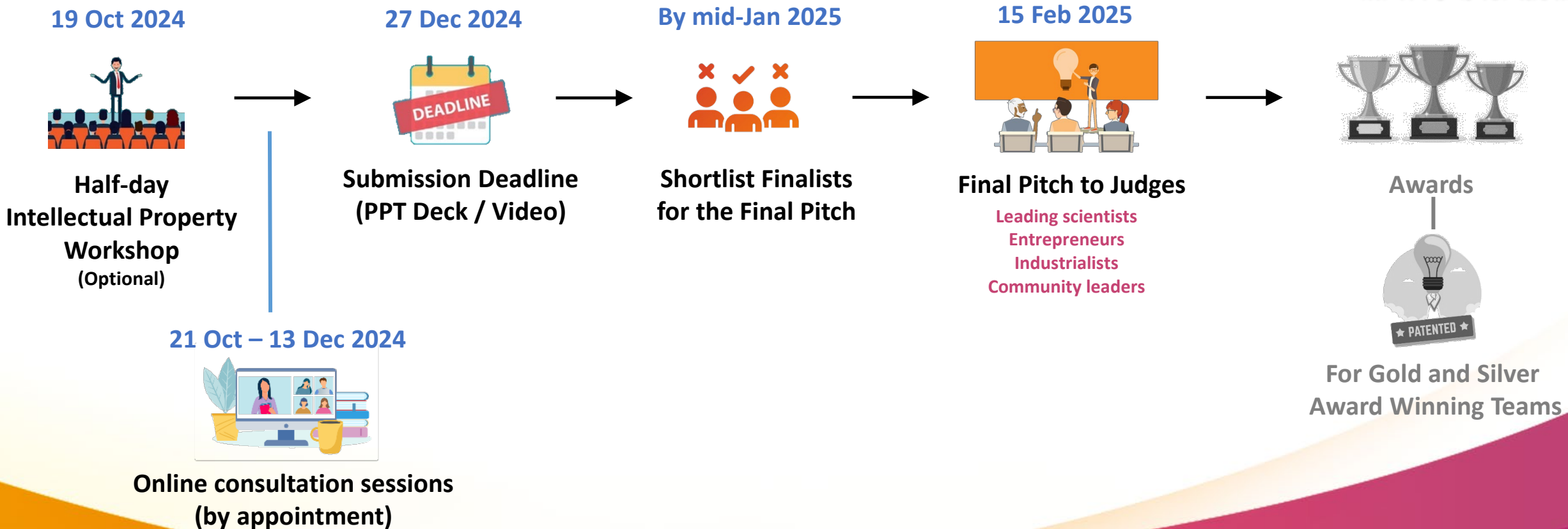
Suggested Content of Your Submission



- **Invention Description**

1. Detailed technical description; specify novel features of your invention
2. The main functions and applications of your invention
3. Advantages of your invention over existing technology/product(s) on the market
4. Status of your research (inception of idea / proof of concept / production of prototype)

Patent Challenge – An Overview

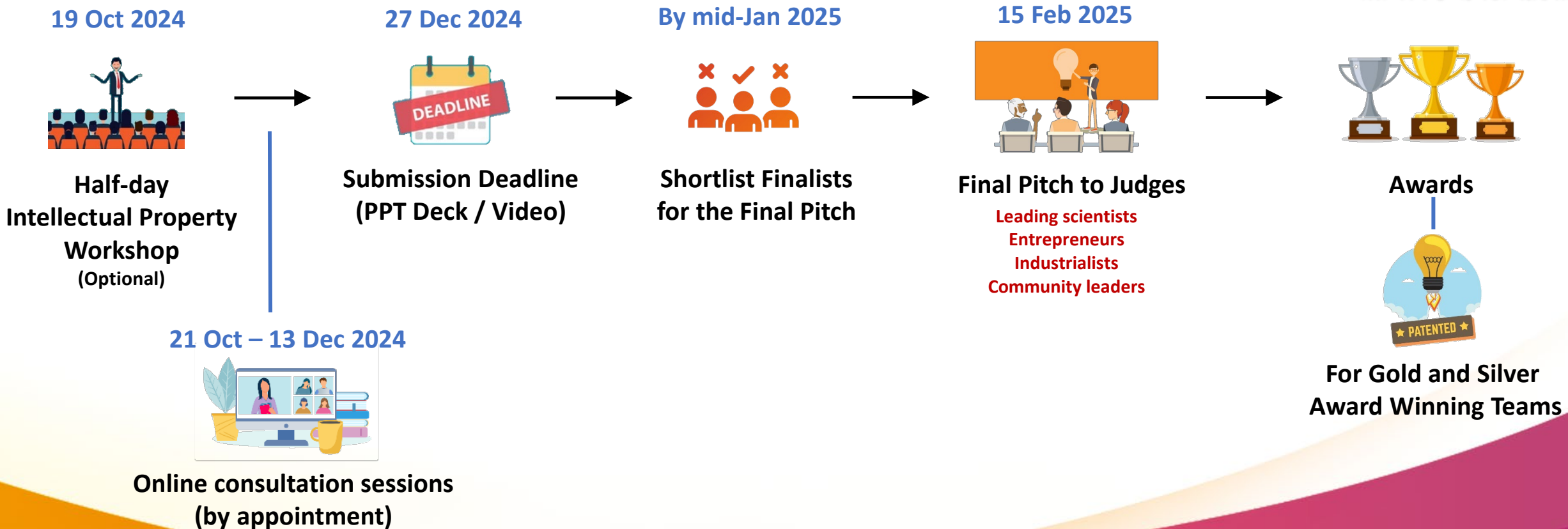


Shortlisting & Pitching to Judging Panel



- Shortlisting: **Mid-January 2025**
- The College of Science will **announce the shortlisted entries** (about 8-12 entries) for the Final Pitch **by 31 January 2025**
- Pitching: **15 February 2025 (Saturday)**; Venue: CityUHK Campus
 - 10 mins per shortlisted team to present the invention in front of the judging panel, followed by a Q&A session (English)

Patent Challenge – An Overview



Awards



- A total of **8 - 12 Awards (Gold, Silver & Bronze)** depending on the quality of submissions
- The College of Science will appoint a patent attorney to file an application for one **Hong Kong Short-term Patent** for the invention of each of the Gold and Silver Award-winning teams
- The application for the patent will be filed in the name of the school of the winning team

Patents from our Winning Teams (2023)



城大科學專利大挑戰

知識產權署專利註冊處
Patents Registry
Intellectual Property Department



香港特別行政區政府
The Government of the Hong Kong
Special Administrative Region

批予短期專利證明書

《專利條例》(第 514 章)

CERTIFICATE OF GRANT OF SHORT-TERM PATENT

Patents Ordinance (Chapter 514)

茲證明下述短期專利在今日批予:

I hereby certify that a short-term patent with the following particulars has been granted today:

專利編號 Patent No.: HK30105980

申請編號 Application No.: 32024091313.9

專利所有人姓名或名稱及地址 Name and Address of Proprietor:

世界龍岡學校劉皇發中學法團校董會

The Incorporated Management Committee of Lung Kong World Federation School Limited Ltd

Wong Fat Secondary School

66 Sycamore Street

Tai Kok Tsui, Kowloon

HONG KONG

發明名稱 Title of Invention:

一種可生物降解過濾材料

A BIODEGRADABLE FILTER MATERIAL

短期專利有效期 (在符合續期的規定下) Term of Short-term Patent (subject to renewal):

由 11.05.2024 起計 8 年

Eight years commencing on 11.05.2024

知識產權署專利註冊處
Patents Registry
Intellectual Property Department



香港特別行政區政府
The Government of the Hong Kong
Special Administrative Region

批予短期專利證明書

《專利條例》(第 514 章)

CERTIFICATE OF GRANT OF SHORT-TERM PATENT
Patents Ordinance (Chapter 514)

茲證明下述短期專利在今日批予:
I hereby certify that a short-term patent with the following particulars has been granted today:

專利編號 Patent No.: HK30106277

申請編號 Application No.: 32024091605.8

專利所有人姓名或名稱及地址 Name and Address of Proprietor:

拔萃女書院

Diocesan Girls' School

1 Jordan Road, Kowloon

HONG KONG

發明名稱 Title of Invention:

反射療法鞋類裝置及反射療法鞋類系統

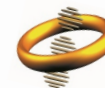
AN REFLEXOLOGY FOOTWEAR APPARATUS AND AN REFLEXOLOGY SYSTEM

短期專利有效期 (在符合續期的規定下) Term of Short-term Patent (subject to renewal):

由 18.05.2024 起計 8 年

Eight years commencing on 18.05.2024

知識產權署專利註冊處
Patents Registry
Intellectual Property Department



香港特別行政區政府
The Government of the Hong Kong
Special Administrative Region

批予短期專利證明書

《專利條例》(第 514 章)

CERTIFICATE OF GRANT OF SHORT-TERM PATENT
Patents Ordinance (Chapter 514)

茲證明下述短期專利在今日批予:
I hereby certify that a short-term patent with the following particulars has been granted today:

專利編號 Patent No.: HK30105664

申請編號 Application No.: 32024091605.8

專利所有人姓名或名稱及地址 Name and Address of Proprietor:

聖士提反女子中學

St. Stephen's Girls' College

2 Lyttelton Road

HONG KONG

發明名稱 Title of Invention:

可調節鞋

ADJUSTABLE FOOTWEAR

短期專利有效期 (在符合續期的規定下) Term of Short-term Patent (subject to renewal):

由 18.05.2024 起計 8 年

Eight years commencing on 18.05.2024

Thank you



<https://www.cityu.edu.hk/csci/local-school-outreach/cityuhk-science-patent-challenge-2024-25>



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Global Research Enrichment and Technopreneurship (GREAT) 環球精研與科創課程

Admission Code 課程編號: JS1200

Professor Andy Siu
Director of Flagship Programme
College of Science

Global Research Enrichment and Technopreneurship (GREAT) (Admission Code: JS1200)

First Intake: 2021/22

Mission:

To provide high-quality learning experience and inspiration to secondary students who are interested in

- pursuing a career in **scientific research**,
or
- starting a **business** that involves the use of new scientific discoveries and/or innovative technologies.



Graduate Prospects



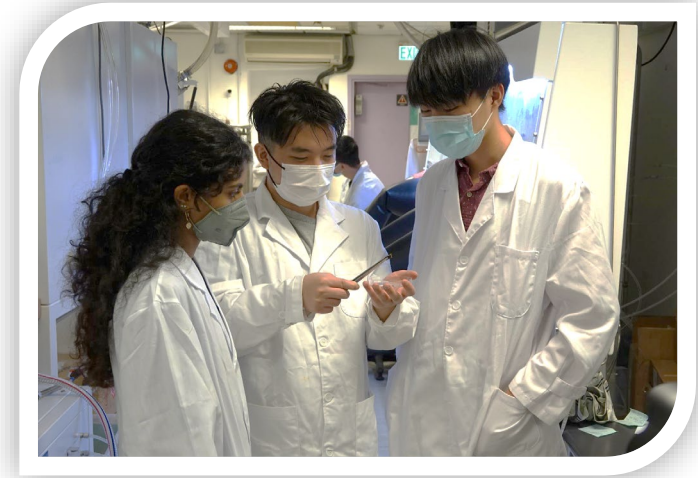
The future economic development of Hong Kong will gradually shift from a **finance-driven mode** to an **innovative and technology-driven** mode.

GREAT Graduates are expected to:

- pursue **higher postgraduate degrees (e.g. PhD)** and eventually become university academia;
- contribute as **research and development (R&D)** scientists/engineers in industries;
- start **businesses** that involve the use of new scientific discoveries and/or innovative technologies.



Highlighted Features



- **Inquiry-based** and **research-driven learning**
- Integrated curriculum with **entrepreneurship** and **business planning**
- **Internships** in local & overseas research institutes or technical start-ups
- **Overseas academic** and **research exchange**
- **Mentorships** by world-renowned professors
- Supported by the **Federation of Hong Kong Industries (FHKI) 香港工業總會**



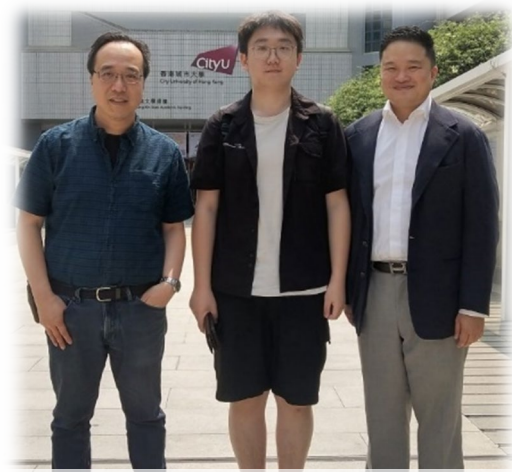
Full Support from



香港工業總會

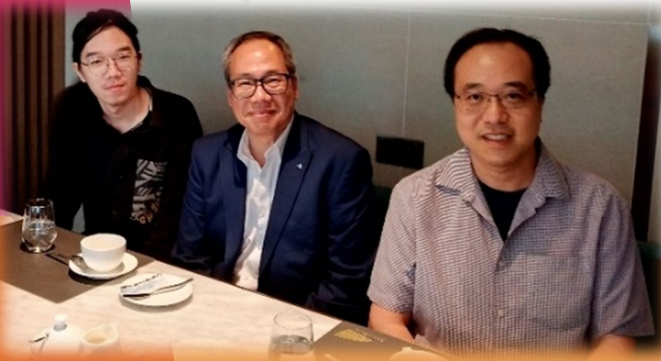
FHKI Federation of
Hong Kong Industries

- Provision of **Summer Internships / Placements** in local or overseas startups
- Provision of **Student Mentoring** by enthused technopreneurs
- **Co-supervision** of students' independent research projects
- Coordination of **Expert Guest Speaker Lectures** on entrepreneurship, technical startups, emerging and innovative technologies, business management, etc.



Mr. Nicholas Lai, General Manager
Pro-Technic Machinery Ltd.

Mr. Peter Shum, Executive Director
iREd Solution Ltd.



Mr. Edmond Yau, CEO
Koln3D Technology (Medical) Ltd.



Mr. Jude Chow, CEO, AEL (International Holdings) Ltd.
Mr. John Wong, General Manager, SP Infinite Tech Ltd.
Mr. Mattis Tsang, Managing Director, Aerosim (HK) Ltd.

JUPAS Programme-specific Entrance Requirements

Programme-specific Entrance Requirements <i>(with weightings applied*)</i>				
English Language	Chinese Language	Mathematics	Citizenship & Social Development	Electives 1 & 2
Level 3 <i>(Weighting: 2)</i>	Level 3 <i>(Weighting: 1)</i>	Level 2 <i>(Weighting: 2.5)</i>	Attained	Level 3 in two electives from: <ul style="list-style-type: none"> ▪ Biology ▪ Chemistry ▪ Economics ▪ M1/M2 ▪ Physics <i>(Weighting: 2.5)</i>

**Note: The College of Science will adopt “Best 4 Subjects” for the calculation of main JUPAS admission scores.*



College-based Admissions



- **Tailored common first-year curriculum** offered by CSCI
- **Free choice** of the **GREAT stream** of BSc CHEM / BSc CM / BSc PHY from Year 2
- **Independent Research** projects from **Year 2 (*earliest*)** under supervision of research supervisors.
- **Training on entrepreneurship, business plan, patent application.**
 - ✓ [MGT2324 Introduction to Entrepreneurship](#)
 - ✓ [MGT4305 Developing and Presenting Business Plan](#)
 - ✓ [CSCI4007 Patent Application & Technopreneurship](#)
- **Welcome interested CSCI students to apply for the GREAT stream**

Flagship Scholarships for Local JUPAS Talents

For 2024 Entry

The Flagship Scholarships cover:

1. Tuition fees and hall fees incurred at CityU

- Full scholarship: **HK\$60,000 per annum**
- Half scholarship: **HK\$30,000 per annum**

(Tenable for max. the normal duration of programme)

2. Tuition fees, accommodation and other necessary expenses incurred at the overseas top-ranked institutions for a **one-off exchange sponsorships of up to one year.**

(Max. HK\$500,000)



Eligibility:

- Local JUPAS school applicants
- HKDSE (3C+2X) ≥ 28 (for Full scholarship); HKDSE (3C+2X) ≥ 25 (for Half scholarship)

Other Scholarships for Top Science Students



ABOUT LOCAL JUPAS ENTRANTS LOCAL NON-JUPAS ENTRANTS WHAT'S MORE KEY DATES ACT NOW! CONTACT US

For 2024 Entry

President's Scholarship

and

HK Tech Scholarships

(Tenable for max. the normal duration of the programme)

Amount per annum:

HK\$300,000

HK\$200,000

Eligibility:

- Local JUPAS school applicants
- HKDSE (3C+2X) \geq 28
- Admitted to a Science programme as a **JUPAS Band A choice**
- Application required

CITYUHK SCHOLARSHIPS FOR HONG KONG TALENTS

PRESIDENT'S SCHOLARSHIP AND HONG KONG TECH SCHOLARSHIPS

FLAGSHIP SCHOLARSHIPS

NEW

INSTITUTIONAL SCHOLARSHIPS FOR LOCAL JUPAS ENTRANTS

DEAN'S SCHOLARSHIPS FOR LOCAL JUPAS ENTRANTS

SCHOLARSHIPS FOR LOCAL NON-JUPAS ENTRANTS

ACT NOW!

Institutional Scholarships

(Tenable for max. the normal duration of programme)

Amount per annum:

HK\$60,000 / \$50,000 / \$30,000

One-off Exchange Scholarship:

HK\$25,000

Eligibility:

- \geq 2 subjects with 5**
- \geq Level 4 in Chinese / English
- HKDSE (3C+2X) \geq 23

Dean's Scholarships

(Tenable for max. the normal duration of programme)

Amount per annum:

HK\$80,000 (HKDSE \geq 25)

HK\$30,000 (HKDSE \geq 23)

<https://www.cityu.edu.hk/scholarship/>



CityU

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