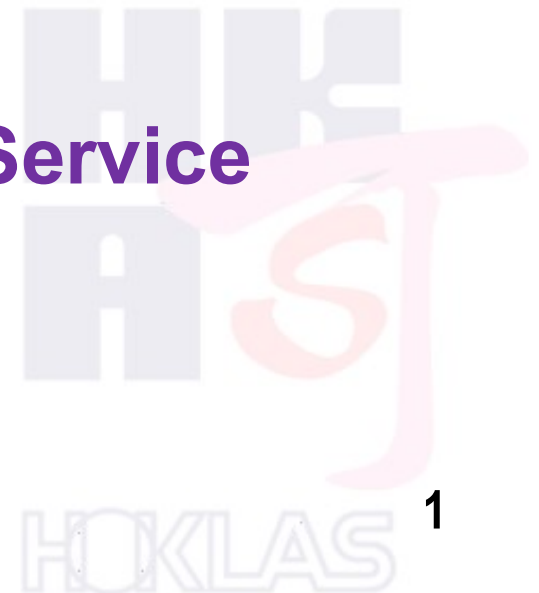# Accreditation Service for Food Testing
食品測試的認可服務

Dr. C. W. Ho

Hong Kong Accreditation Service

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香港認可處 (HKAS)

HKAS is part of Innovation and Technology Commission of the Hong Kong Special Administration Region (HKSAR) Government.
香港認可處是香港特別行政區政府創新科技署屬下工作組別

It was set up in 1998 (previously known as HOKLAS since 1985)於 1998年成立(前身是香港實驗所認可計劃HOKLAS執行機關，於 1985年成立)

It is the official accreditation body in Hong Kong
是香港官方認可機構

It provides independent and impartial accreditation services
提供獨立和公正的認可服務

- HKAS provides accreditation services（認可服務）to testing laboratories, certification bodies and inspection bodies under 3 schemes:
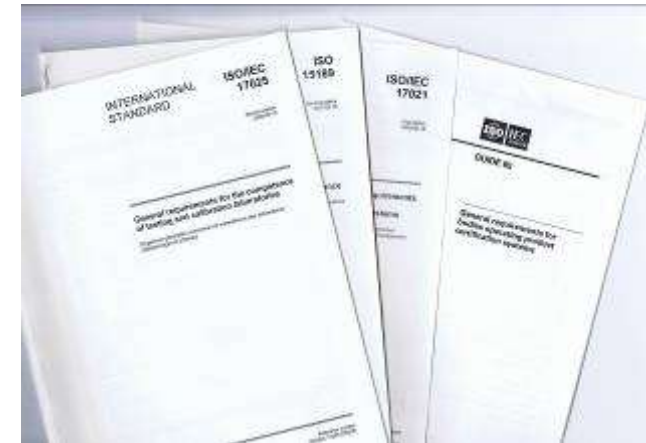

  - ➢ HOKLAS (香港實驗所認可計劃)

  - ➢ HKCAS (香港認證機構認可計劃)

  - ➢ HKIAS (香港檢驗機構認可計劃)

- Participation in the 3 schemes is voluntary

- The schemes are operated in accordance with international standards

Features of HKAS Accreditation

- Voluntary

- Based on international standards

- Rigorous assessment and monitoring
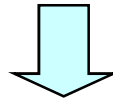
- Independent and impartial

- International recognition

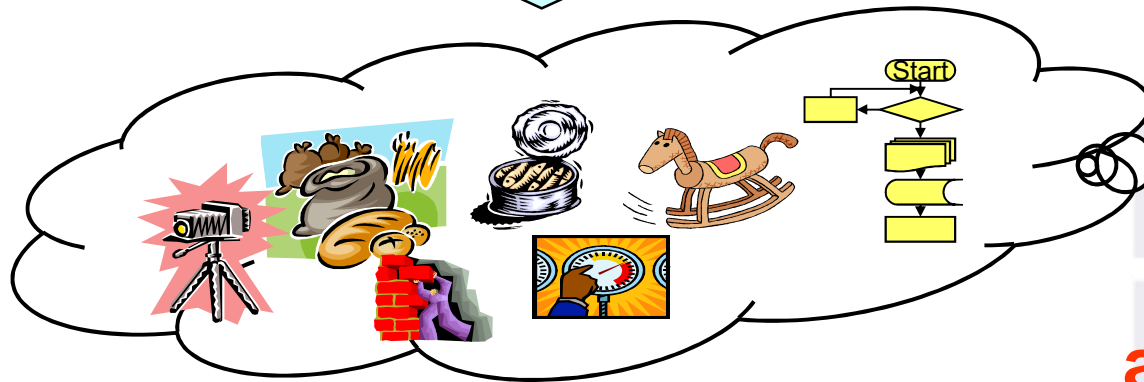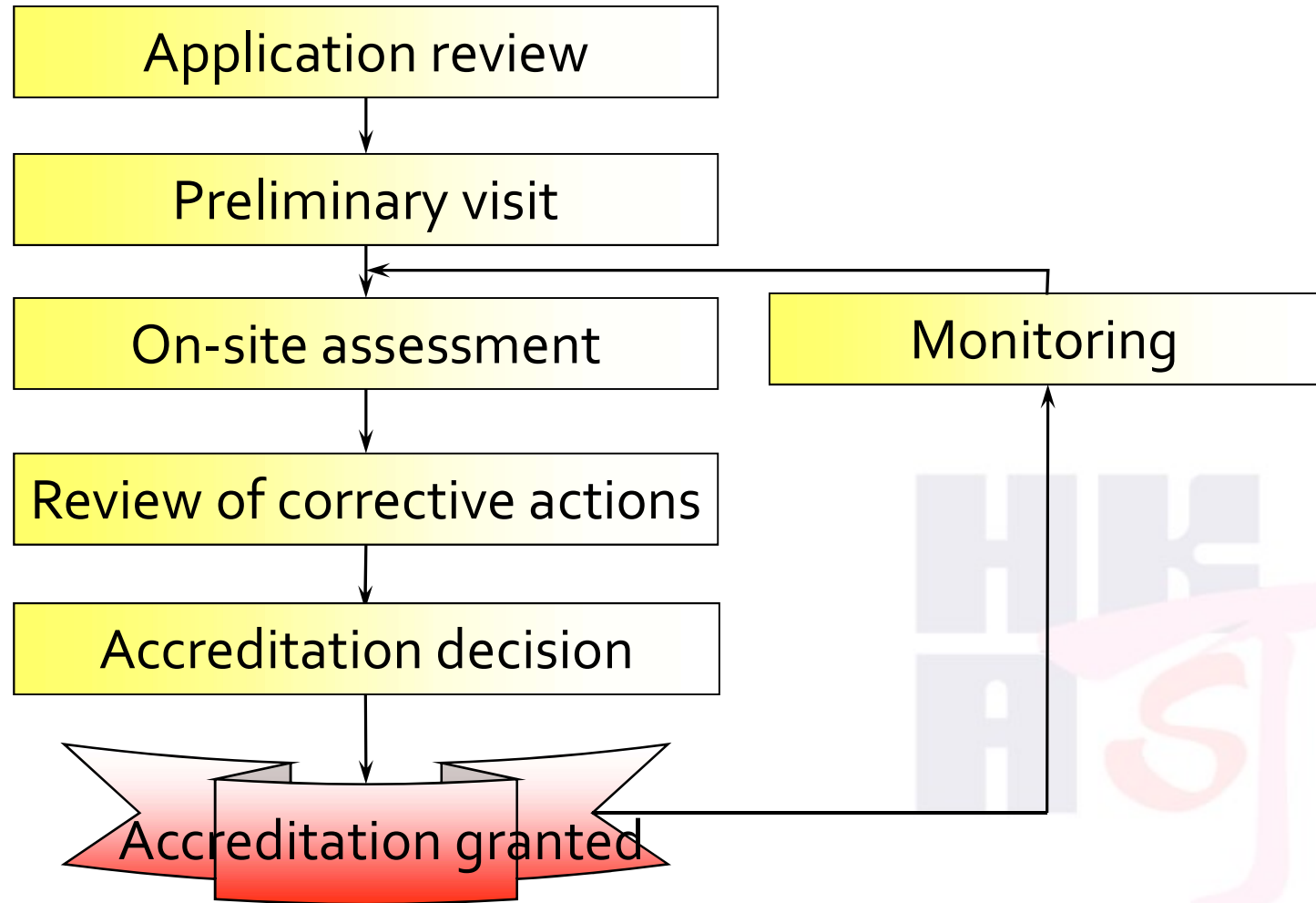**Accreditation Body**
- provides the assurance

Are they competent?

Test, Certification, Inspection

Are they acceptable?

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Accreditation Process 認可程序

```
┌──────────────────────────────┐
│      Application review      │
└──────────────────────────────┘
                │
                ▼
┌──────────────────────────────┐
│       Preliminary visit      │
└──────────────────────────────┘
                │
                ▼
┌──────────────────────────────┐          ┌──────────────────────────────┐
│      On-site assessment      │          │          Monitoring          │
└──────────────────────────────┘          └──────────────────────────────┘
                │
                ▼
┌──────────────────────────────┐
│  Review of corrective actions │
└──────────────────────────────┘
                │
                ▼
┌──────────────────────────────┐
│     Accreditation decision   │
└──────────────────────────────┘
                │
                ▼
        Accreditation granted
```

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Certificate of Accreditation 認可證書

Test Reports & Certificates Recognised Internationally 測試報告及證書獲國際承認

- HKAS is signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA) and International Accreditation Forum (IAF) Multilateral Recognition Arrangement (MLA)
  香港認可處 (HKAS) 是國際實驗所認可合作組織 (ILAC) 及國際認可論壇 (IAF) 的互認協議簽署成員

- Endorsed reports and accredited certificates issued by HKAS accredited organisations are recognised by its MRA / MLA partners (involving 105 accreditation bodies in 104 economies in the world)
  香港認可處的互認協議夥伴 (當中包括 104個經濟體系共105個認可機構) 均承認獲香港認可處認可機構所發出並印有香港認可處認可標誌的報告及證書)

Coverage of the ILAC MRA
ILAC MRA 的覆蓋範圍

- ILAC MRA Signatories
- ILAC Associate Members
- ILAC Affiliate Members

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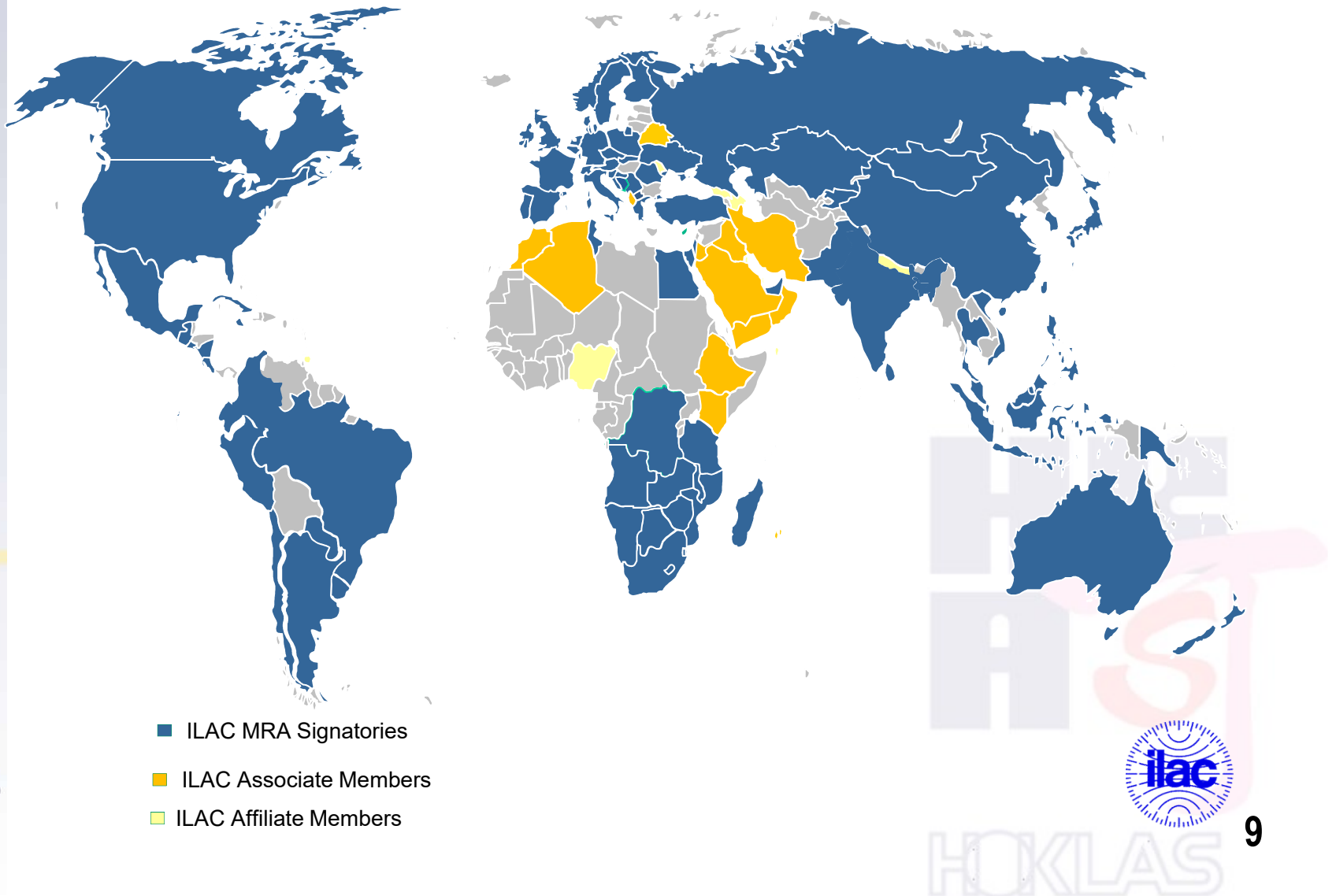
Coverage of the IAF MLA
IAF MLA 的覆蓋範圍

- ■ IAF MLA Signatories
- ■ IAF Members not yet Signatories

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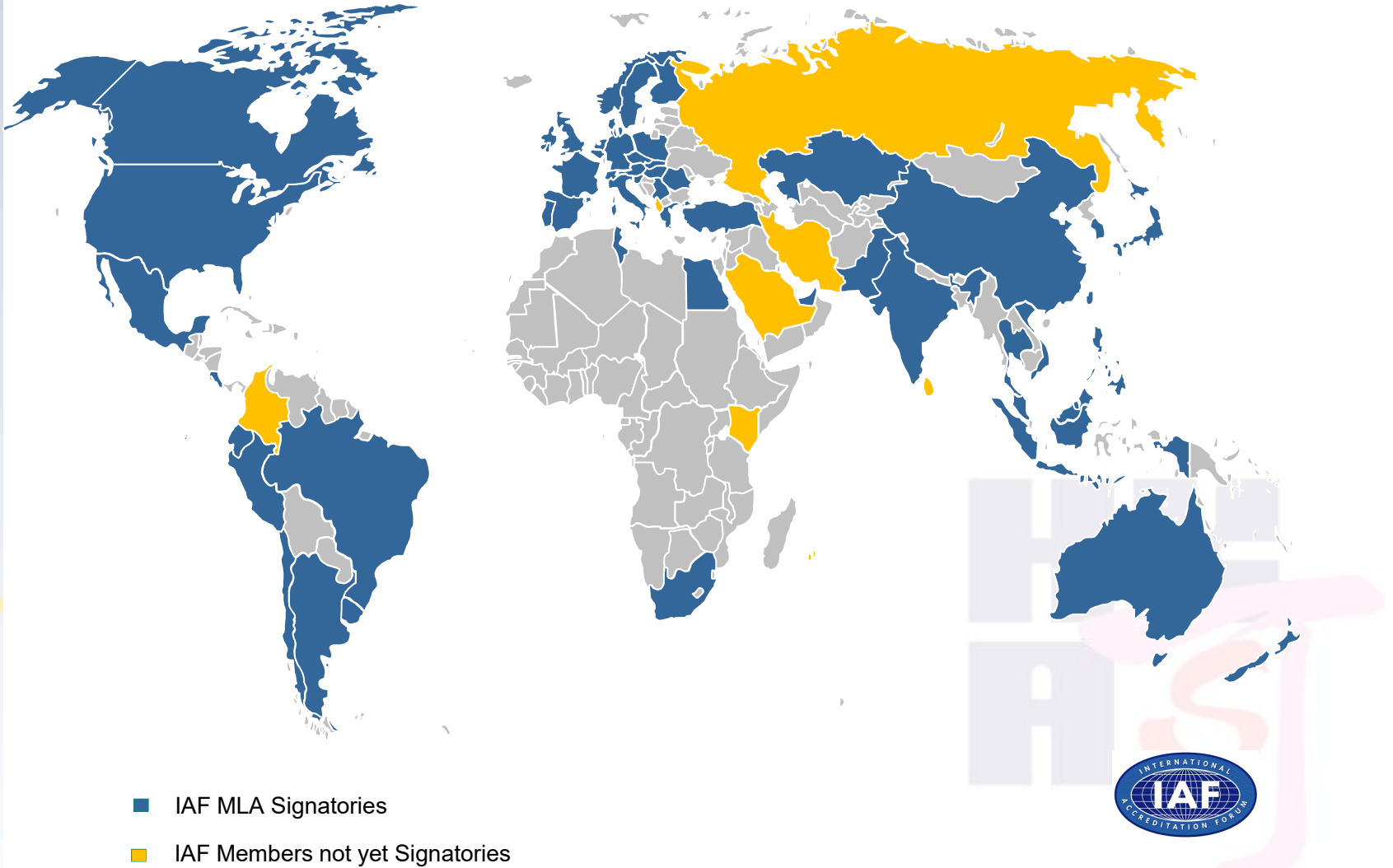
Endorsed Reports and Accredited Certificates under HKAS Accreditation Schemes
印有香港認可處認可標誌的報告及認證證書

- Unless otherwise approved and specified, only results of accredited activities can be shown in endorsed reports and accredited certificates

  除非經批准及清楚註明，否則獲認可機構只可就獲得認可資格的活動所得結果發出印有香港認可處認可標誌的報告及證証證書。

- Since the competence of the accredited activities has been assessed, the reliability of results in endorsed reports and certificates can be assured

  由於獲認可機構在獲得認可資格的活動上其能力曾經接受嚴謹的評審，印有香港認可處認可標誌的報告及證証證書上的結果會更可靠。

食品測試
Food Testing

Nutrition Information	營養資料
	Per 100g or Per 100ml/ 每 100 克或每 100 毫升
Energy /能量	kcal or kJ /千卡或千焦
Protein /蛋白質	g /克
Total fat /總脂肪	g /克
- Saturated fat /飽和脂肪	g /克
- Trans fat / 反式脂肪	g /克
Carbohydrates /碳水化合物	g /克
- Sugars /糖	g /克
Sodium /鈉	mg /毫克
Insert nutrient(s) involved in claim(s) / 填入涉及聲稱的營養素	g, mg or μg 克、毫克或微克
Insert other nutrient(s) to be declared / 填入其他標示的營養素	g, mg or μg 克、毫克或微克
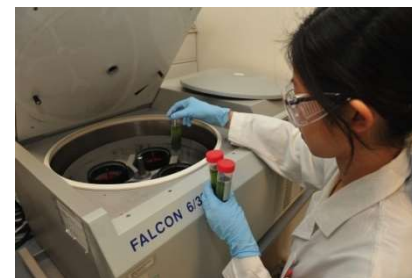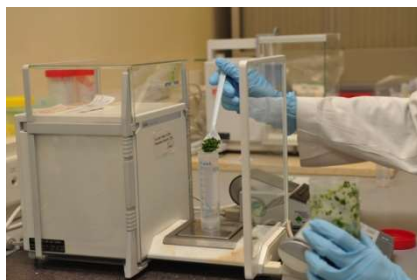
Food Testing Services Provided by Hong Kong Laboratories

– Microbiological examination

– Chemical composition analysis (e.g. for use in nutrition labeling)

– Testing for food additives (e.g. anti-oxidants, preservatives, coloring matters and sweeteners, etc.)

– Testing for contaminants (e.g. trace elements, organic, pesticide and veterinary drug residues, radionuclides, etc.)

– Other food testing (e.g. GM food, food species identification by DNA sequencing)

– Testing of Food Contact Materials (e.g. testing of food containers)

Accredited Food Testing Laboratories
獲認可食品測試實驗所

- As of 1 June 2021, there are totally 29 laboratories accredited by HKAS to provide public service for testing of food (including micro-biological testing of food) and food contact materials

- For details, please visit https://www.itc.gov.hk/en/quality/hkas/conformity_assessment_bodies/hoklas.html#t_services

Accreditation of Food Testing Laboratories under HOKLAS

- HOKLAS accreditation criteria for food testing laboratories are given in:

- HKAS 002 Regulations for HKAS Accreditation

- ISO/IEC 17025:2017 – 'General requirements for the competence of testing and calibration laboratories'

- HKAS PD001 'HKAS Policy for Accreditation of Laboratories according to ISO/IEC 17025:2017 under HOKLAS (ISO/IEC 17025:2017 HOKLAS Policy)'

Accreditation of Food Testing Laboratories under HOKLAS

➢ Relevant HKAS and HOKLAS Supplementary Criteria documents, including HOKLAS Supplementary Criteria No. 8 and 37

Selection of Methods

➢ Methods published in international, regional or national standards (e.g. ISO, EN, BS, etc.), or by reputable technical organisations (e.g. AOAC) shall preferably be used

➢ Methods (including their application scope and performance characteristics) shall be appropriate and adequate for their intended use, relevant to the customers' needs and consistent with specified or regulatory requirements

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Validation of Methods

➢ Laboratories shall validate non-standard methods, laboratory-developed methods and standard methods used outside their intended scope

➢ The validation involves assessment of the method performance characteristics against the intended use

➢ Performance characteristics can include, but not limited to, measurement range, selectivity, repeatability or reproducibility, bias, cross-sensitivity against matrix interference, etc.

Examples of Method Validation Guidelines

➢ IUPAC Technical Report 'Harmonized Guidelines for Single-Laboratory Validation of Methods of Analysis'

➢ EURACHEM Guide 'The Fitness for Purpose of Analytical Methods: A Laboratory Guide to Method Validation and Related Topics'

➢ AOAC INTERNATIONAL 'AOAC Peer-verified Methods Program - Manual on Policies and Procedures'

Method Verification

> ➢ If methods published in international, regional or national standards are used, the laboratory shall still verify that it can properly perform the methods before introducing them by ensuring that it can achieve the required performance

Establishing metrological traceability of test results

➤ Proper calibration and maintenance of measuring equipment, e.g. calibration by accredited calibration laboratories, or by certified reference standards/materials, etc.

➤ Use of certified reference materials for method verification/validation, as far as practicable.

Ensuring validity of test results

- ➢ Participation in proficiency testing and interlaboratory comparisons

- ➢ Use of reference materials or quality control materials

- ➢ Calibration/functional check of measuring and testing equipment

- ➢ Blank, duplicate and spike study, etc.

聯絡我們 - 網址
Contact us - website

香港認可處

Hong Kong Accreditation Service

www.hkas.gov.hk

Thank you