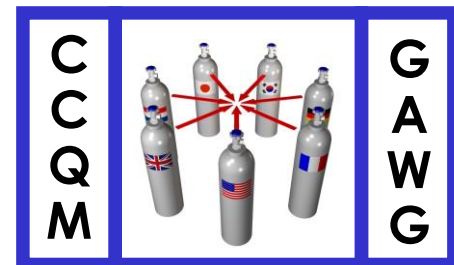


GAWG Strategy for 2016-2026

Jin Seog Kim



Major Achievement in last period (2012-2016)

- **Established Core KC scheme: Less comparison, but covered widely.**

Ex) CCQM-K111: 8 NMI, EURAMET: 1+8, APMP:2+7, SIM: 1+1,
COOMET:1+3 (Total 27 NMIs or DIs participated)

- **Developed and approved GAWG strategy document**
 - **Adopted scheme and rule on Track A, B and C**
 - **Applied track A scheme to CMC claims in 2017**
- **Cope with emerging areas: ambient level GHGs, Particles, Toxic gases, New energy gases**
- **Improved technology in impurity analysis and adopted new instrumental methods (CRDS, FTIR, Permeation, isotope ratios)**

Major Challenges

- **Specific challenges are**
 - **analytical difficulty (natural gas, refinery gas, low levels of Sulphur dioxide)**
 - **unstable and reactive components (ammonia, ethanol)**
- **Our aim is provide more resource for focusing on analytical challenges (track B) and responding to emerging requirements.**
 - **Track B key comparisons address issues unstable and reactive gas mixtures.**
Ex) HCl, HCNO isotope ratio, nano and micro particles.

What is new in the updated strategy

- Planned core KCs
- Co-work with international bodies (WMO, IAEA, ISO TC)
- Cope with new emerging areas such as Hydrogen energy, bio and shale gas, urban and indoor air quality, and reactive gas in workplace

Number of comparisons per year

- 3 per year (33 KCs or PSs/11 years)

Planned KCs: Track B during 2017-2026

CCQM-K150	PS(Micro-scale particles, number/charge concentration)	2017	New emerging requirements
CCQM-PXX	PS (Carbon/Oxygen isotope ratios in CO ₂)	2020	New emerging requirements
CCQM-KXX	KC (New energy gas)	2020	Energy gases
CCQM-KXX	KC (ppb level of water vapour)	2021	New emerging requirements
CCQM-PXX	PS(HCl or HF in workplace)	2021	Atmospheric and air quality
CCQM-KXX	KC (Formaldehyde in air)	2021	Atmospheric and air quality
CCQM-KXX	KC(NH ₃)	2022	Atmospheric and air quality
CCQM-KXX	KC (New fuel gas, LPG)	2023	Energy gases
CCQM-KXX	KC (VOCs in air)	2024	Atmospheric and air quality
CCQM-KXX	KC(Toxic gas)	2026	Atmospheric and air quality

+ Repeat GHGs, Air Quality, 4 Track As