



**GAW World Calibration Centre (WCC) for Methane  
and  
Quality Assurance/Science Activity Centre (QA/SAC)  
in Asia and the South-West Pacific**



**Methane Reference Gas Intercomparison for Asia from 2011 to 2012  
Technical Details on Laboratory Measurements**

**China Meteorological Administration (CMA)  
Measurement at Mt. Waliguan**

*1. Information on contributors*

- (1) Contributors: Dr. Zhou Lingxi and colleagues
- (2) Organization: China Meteorological Administration, China

*2. Information on instrument*

- (1) Analytical method: Gas Chromatography (FID)
- (2) Manufacturer: Agilent
- (3) Model: Agilent-6890N

*3. Information on sampling*

- (1) Sampling volume: 10 ml
- (2) Carrier gas: Nitrogen
- (3) Flow rate: 70 ml/min
- (4) Temperature of the oven: 75°C

*4. Information on the main column*

- (1) Diameter: 1/8 inch
- (2) Length: 3 feet
- (3) Material: stainless steel

Note: also a 4 feet pre-column of molecular sieve 5A 60-80 mesh.

*5. Information on column packings*

- (1) Trade name: Unibeads 1S
- (2) Mesh: 60-80

*6. Information on standard gas*

- (1) Number of standard gases: 2
- (2) Concentration of standard gases: 2029.0 and 1809.5 ppb
- (3) Scale: NOAA04 Scale CH<sub>4</sub>-in-air