



**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 Japan from 2015 to 2016
Technical Details on Laboratory Measurements**

National Institute of Advanced Industrial Science and Technology (AIST)

1. Information on contributors

- (1) Contributors: Dr. Shohei Murayama
- (2) Organization: National Institute of Advanced Industrial Science and Technology

2. Information on instrument

- (1) Analytical method: Gas Chromatography (FID)
- (2) Manufacturer: SHIMADZU
- (3) Model: GC-14BPF

3. Information on sampling

- (1) Sampling volume: 10mL
- (2) Carrier gas: Nitrogen (ultra high purity)
- (3) Flow rate: 48 mL/min
- (4) Temperature of the oven: 70°C

4. Information on the main column

- (1) Diameter: 3 mm
- (2) Length: 1 m
- (3) Material: Stainless steel

5. Information on column packings

- (1) Trade name: Activated charcoal
- (2) Mesh: 60/80

6. Information on standard gas

- (1) Number of standard gases: 4
- (2) Mole fraction of standard gases: 1006.5, 1552.2, 1999.0, 2534.0 ppb
- (3) Diluent gas: Purified air
- (4) Scale: AIST Scale

7. Other information (references, papers, literatures, etc.)

Aoki, S., T. Nakazawa, S. Murayama and S. Kawaguchi, Measurements of atmospheric methane at the Japanese Antarctic station, Syowa, Tellus, Ser. B, 44, 273-281, 1992