

GTR-13 Phase 2 on H&FCEV

IWG 5th Meeting

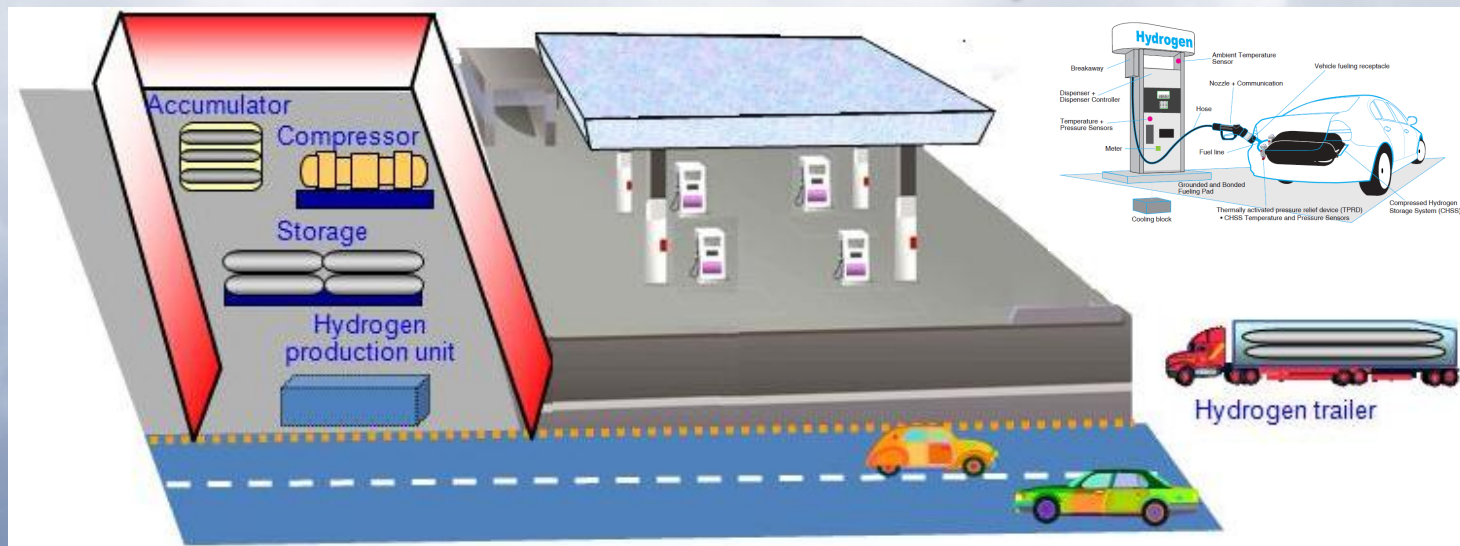
Powertech Labs, Vancouver, Canada

March 5-7, 2019



ISO/TC 197 Hydrogen Technologies Update

Andrei V. Tchouvelev, Chair



ISO/TC 197 Plenary Week Vancouver, Canada December 3-7, 2018



Program:

- ✓ Working group meetings
- ✓ Strategic planning meeting
- ✓ Plenary meeting





ISO-IPHE RCSS Strategic Planning Meeting: *H2@Market: FCEV – H2 Station Interface: Interoperability, Regulations, Certification*



RCSS Working Group

Vancouver, December 5, 2018

Hosted by  CSA GROUP™

Interoperability:

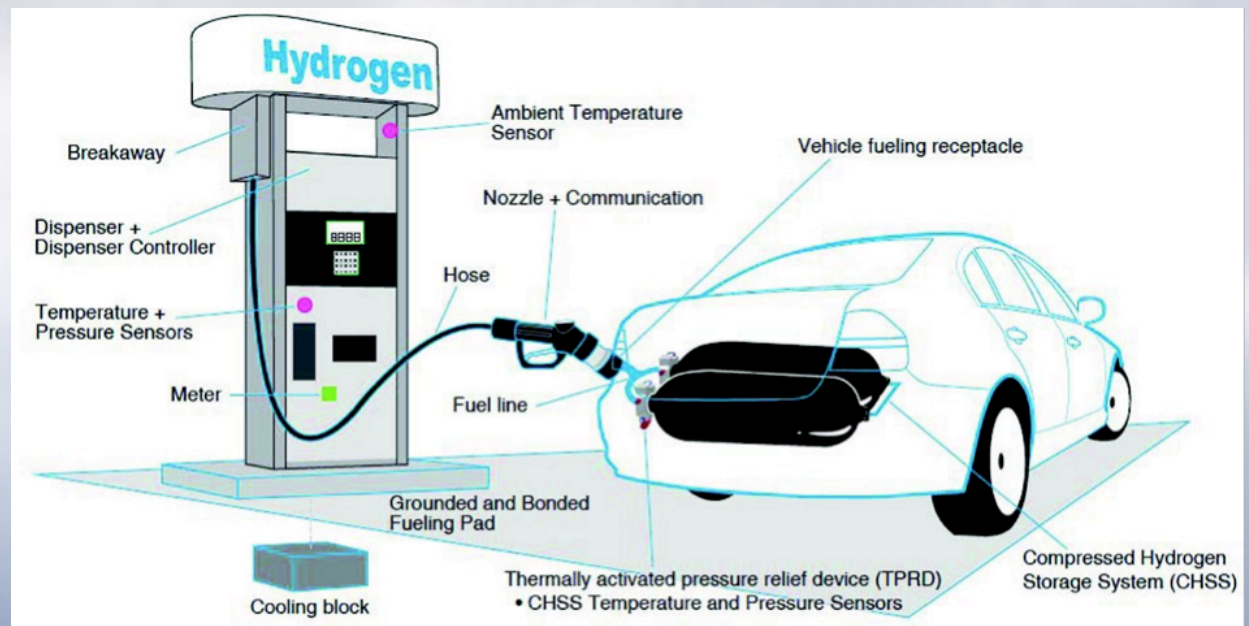
- ✓ Technical Aspects & Economics
- ✓ Hazards & Risk
- ✓ Fueling Protocol

Regulations:

- ✓ GTR13
- ✓ National

Certification:

- ✓ Dispenser Validation
- ✓ Fuel Quality & Control
- ✓ Metrology



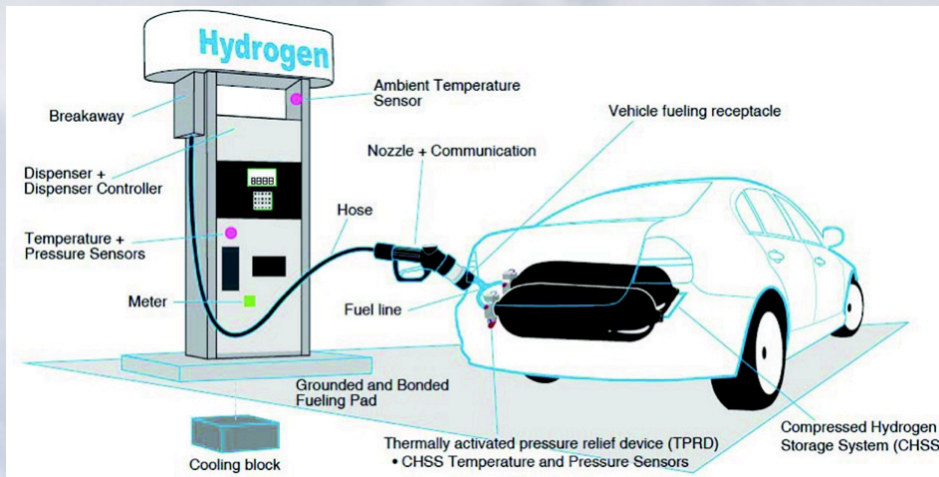
FCEV safety depends on dispenser operation and station controls!

ISO/TC 197 Work Program Update



Fuel Quality
ISO 14687 Rev
→ **FDIS (Pub. 2019)**

Electrolysers
ISO 22734 Rev
→ **FDIS (Pub. 2019)**



Storage Technologies

GH₂ Ground Storage ISO 19884 → **FDIS (Pub. 2019)**
Me-Hy Portable Storage
ISO 16111 Rev → **Published in 2018**

Vehicle Components

Fueling Connectors
ISO 17268 Rev → **FDIS (Pub. 2019), cont. work on H70HF (HD)**
On-board Storage
ISO 19881 → **Published in 2018, cont. to align with GTR13 Ph2**
TPRD ISO 19882 → **Pub. in 2018, cont. to align with GTR13 Ph2**

Fueling Family ISO 19880

- 1: **HFS Gen'l Req'ts** → **FDIS (Pub. 2019)**
- 2: **Dispensers** → **DIS Restart**
- 3: **Valves** → **Published in 2018**
- 4: **Compressors** → **CD**
- 5: **Hoses** → **FDIS (Pub. 2019)**
- 6: **Fittings** → **CD**
- 7: **Fueling Protocols** → **NWIP?**
- 8: **Fuel QC** → **FDIS (Pub. 2019)**