## **Dr. Fumio UENO**

# Japan's candidate for the IEC Thomas Edison Award 2017

## Dedicated to IEC work as Chair of TC 105

Former Convener of IEC TC105 WG10 of IEC/TC105 (Fuel cell technologies)
Technical Committees in IEC



- Safety, performance tests and interchangeability of micro fuel cells
- Electrical energy storage systems (Ex. Redox flow batteries joint with IEC/TC21)
- Safety of fuel cell power systems for industrial trucks such as folk lifts
- Standardization for future technologies for fuel cells (Ex. Hydrogen storage power systems)
- Life cycle assessment on stationary fuel cell power systems for residential applications

### Promotion and enhancing values of IEC standards through integration into policy frameworks

- IEC 62282-6 series commercialized safety and useful micro fuel cells
- IEC 62282-4 series established safety and performance test methods on fuel cell power systems for industrial trucks
- IEC 62282-8 series established WG13 for energy storage systems using fuel cell modules in reverse mode
- IEC 62282-9 series established WG14 for life cycle assessment

### • Efforts to achieve effective collaboration between other SDOs and to exhibit IEC leadership

- Negotiation with International Commercial Aviation Organization (ICAO)
- Establishment of joint working group under TC21
- Built relationship with ISO TC197 and active liaison with other IEC TCs such as TC108 and TC120
- Leadership for coordinating in the field of Smart Cities as the chair



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#### **ROLES IN IEC**

- 2016 present: Chair of IEC SyC Smart Cities
- 2014 present: Convener of IEC TC21 JWG7 Flow batteries
- 2009 present: Chair of IEC TC105 Fuel cell technologies
- 2012 present: Expert of IEC TC5 JWG6 Micro CHP
- 2017 present: Expert of IEC SMB ahG 70 Review of Systems activities
- 2013 2016: Convenor of IEC SMB SEG1 on Smart Cities
- 2013 2015: Expert of IEC MSB smart cities White Paper Group
- 2004 2009: Convener of IEC TC105 WG10 Micro fuel cells

#### MEMBERSHIP OF PROFESSIONAL / STANDARDIZATION ASSOCIATIONS

- 2014 2016: Expert of ISO/TMB/SAG on Smart Cities
- 2008 2010: IEC representative of UN/ECOSOC Sub-Committee of Experts on the Transport of Dangerous Goods (TDG)
- 2006 2010: USFCC representative of ICAO DGB (Dangerous goods board)
- 2009 present: Board member of the national committee on fuel cell technologies (JISC/JEMA)
- 2009 present: Convener of the national committee on micro fuel cells (JISC/JEMA)

#### **PROFESSIONAL BIO**

- 2011 present: Technology Executive, Toshiba Electronic Engineering Corporation
- 2001 2011: Technology Executive, Display Devices & Components Control Center, Toshiba Co.
- 2000 : Senior Manager, Application engineering division, Toshiba Battery Co., Ltd.
- 1985 2000: Toshiba corporate research and development center
- 1983 1985: Guest Scientist, Max Plank Institute for Solid State Research, Stuttgart Germany
- 1983 Dr. Science: Tohoku University, Sendai, Japan
- 1980 M.S.: Tohoku University
- 1978 B.S.: Tohoku University