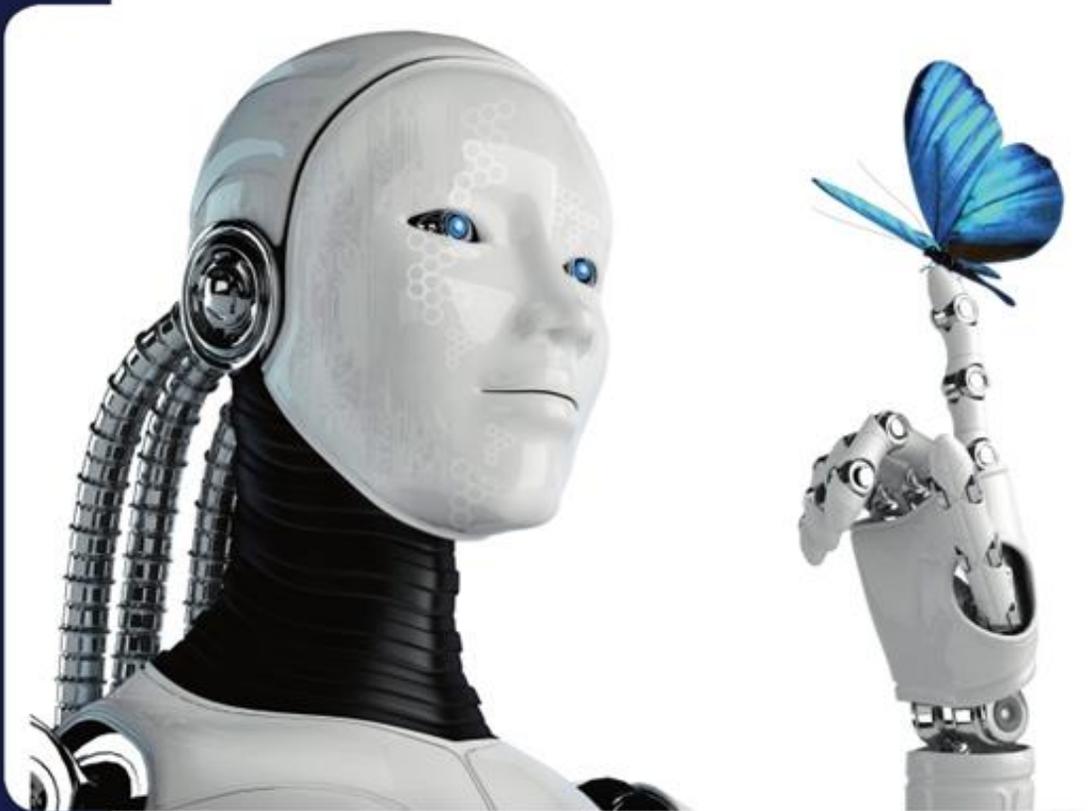


Newsletter May, 2023



ICR

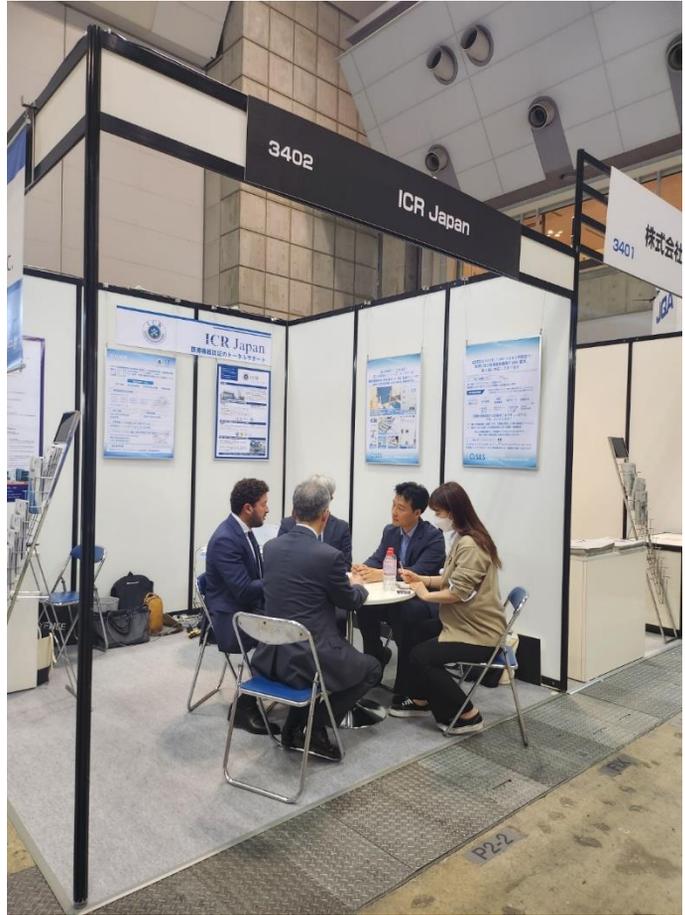


Hot Issue

1. ICR Japan participated 'Medtec Japan 2023'
2. FORD, Supplier Technical Assistance visited ICR
3. Installation of additional battery module cyclers
4. Grace period for KMVSS
5. 2023 2nd Auditor Training Course Plan
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radio facilities



ICR Japan participated 'Medtec Japan 2023'



- **ICR Japan participated in the 'Medtec Japan 2023'** which is held from April 19 to 21, 2023 in Tyoko Japan.
- **ICR Japan was established** to provide certification and testing services of ICR to Japanese companies, and with participation in this exhibition, we would like **to provide ISO 13485 certification, medical device testing, CE/MDR services to Japanese companies.**

ICR Japan participated 'Medtec Japan 2023'



- Medtec Japan is an **exhibition specializing in medical devices**, and companies and audiences participating in Medtec Japan 2023 have shown great interest in starting ICR Japan's business.
- ICR Japan will provide **machine testing and certification, explosion-proof testing and certification services as well as medical devices testing and certification service.**

☎ Inquiries

ICR Japan / Sim, Sang-Woo
T. 070-5083-2606 / sam@icrqa.com

FORD, Supplier Technical Assistance visited ICR



- On March 17th, **FORD STA(Supplier Technical Assistance) visited ICR.**
- The purpose was **to verify the capabilities of the ICR test institute in charge of testing electric vehicle parts for FORD vehicles**, and I visited with the person in charge of LG Magna, who is developing the parts.
- The engineer in charge of FORD **evaluated ICR Co., Ltd. as having very good test capabilities and equipment**, and requested that ICR continue to be in charge of testing vehicle parts for FORD.

☎ Inquiries

Mobility Center/ Im, Dae-Hyun
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Installation of additional battery module cyclers



- Additional battery module cyclers and chambers for performance test were installed in April.
 - **Module cycler: 12 channels (200 V, 500 A)**
 - **1.2m test chamber: Temp&humid chamber 6 EA**
- It will be available to use in May due to pre-operating inspection and calibration. Previously, 8 channels and 4 chambers were operated as module performance tests, so a **total of 20 channels and 10 chambers can be used for module performance tests.**

ICR Battery module performance tests



 **Inquiries**

Battery Testing / Yang, Chul-Ho

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Grace period for KMVSS



- ▣ Safety requirement of REESS of road vehicles with regard to KMVSS was amended in May 2021 and it entered into force on July 1. For manufactured/assembled or imported vehicles at the time of enforcement received **a grace period until June 30, 2023.**
- ▣ There're two months left until the end of a grace period and **KMVSS test will take 3 to 4 weeks** to end all test, so **you should better apply KMVSS test in May at the latest.**
- ▣ If you have any inquiry about **battery testing and certification service** as well as KMVSS, **please feel free to contact our Battery Testing Center.**

 **Inquiries**

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2023 2nd Auditor Training Course Plan

- ICR International Certification Registrar Ltd. is an auditor training provider directly registered to Exemplar Global.
- ICR plans to hold an **auditor training course in May 2023**.
- Through the AU, TL, QM, EM, OH and MD courses, all the trainees will be conducted so that the one's can be qualified for each module.
- Our training teaches auditors how to provide impartial audits based on objective evidence.

※ The detailed schedule of the auditor training course in May 2023 is as follows.

AU/TL	May 08~10 (3 days)	8 hours/1 day, total 24 hours (3 days)
QM	May 11~12 (2 days)	8 hours/1 day, total 16 hours (2 days)
EM	May 15~16 (2 days)	8 hours/1 day, total 16 hours (2 days)
OH	May 17~18 (2 days)	8 hours/1 day, total 16 hours (2 days)
MD	May 22~23 (2 days)	8 hours/1 day, total 16 hours (2 days)

※ Please note that the training schedule and location may change depending on circumstances and each training may be held or not depending on the number of applicants.

📞 Inquiries

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MESG measurement test (Maximum Experimental Safe Gap)

- As a number of machines use flammable gas or vapor to perform various processes, the need to check the characteristics (Group) of gas and vapor is increasing. In particular, **for mixed gases and vapors**, there is not enough data to confirm **the characteristics (Group)**, which **should be verified by measuring the maximum experimental safety gap (MESG)**.
- The maximum experimental safety gap (**MESG**) is conducted in accordance with the test method specified in ISO/IEC 80079-20-1:2017 and **is divided into groups IIA, IIB and IIC**.
- The test is being conducted by **the ICR Explosion proof team**.

Gas group	Type of gas	MESG
IIA	Acetone, Ammonia, Benzene, n-Butanol, n-Butyl acetate, Ethane, Ethanol, Ethyl Acrylate, n-Heptane, n-Hexane, Hexanol, Kerosene, Methane, Methanol, Naphtha, Propane, 1-Propanol	≥ 0,9 mm
IIB	Acrolein, Acrylonitrile, 1,3-Butadiene, Cyclopropane, Diethyl ether, Ethylene, Ethylene oxide, Hydrogen Cyanide, Methyl Acetate	0.5 ~ 0.9 mm
IIC	Acetylene, Carbon Disulfide, Hydrogen	≤ 0.5 mm



MESG measurement test (Maximum Experimental Safe Gap)

ICR's Test equipment for MESG



 **Inquiries**

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Amendment of technical standards for radio facilities

National Radio Research Agency Notification No. 2023-5

In accordance with **Article 45 (Technical Standards) of the Radio Act** and Article 123 (1) 1-7 (Delegation and Entrustment of Authority), other business radio facilities such as radio equipment and radio equipment for detection of radio waves in simple radio stations, space stations, and earth stations shall be revised and announced as follows.

04/03/2023

Director of the National Radio Research Agency

■ A part of 「 Radio facilities for simple radio stations, space stations, earth stations, radio facilities for detecting radio waves, radio facilities for detecting radio waves, and other business radio facilities 」 is amended as follows.

■ Article 19

(Wireless Facilities for Intelligent Transportation Systems)

- ▶ ① Technical standards for radio equipment for intelligent transportation systems using radio waves in the frequency band **5855-5875MHz** are as follows.

1. Occupied frequency bandwidth shall be 20 MHz or less



Amendment of technical standards for radio facilities

2. The modulation method is digital modulation, and the connection method is orthogonal frequency division Medium access mode (OFDM)
3. The central frequency of the radio wave to be emitted shall be 5865 MHz
4. Antenna supply power shall be 200 m² or less, and equivalent isotropic radiation power shall be 4 W or less
5. The allowable frequency deviation shall be within $\pm 0.1 \times 10^{-6}$ of the center frequency
6. Unnecessary firing shall be less than or equal to the following reference value
 - a. an out-of-band launch

Occupancy Frequency Bandwidth Separation Frequency from End	Reference value (average power)	Decomposed bandwidth
$\pm 0 \sim 1$ MHz	-21 dBm	30 kHz
$\pm 1 \sim 5$ MHz	-10 dBm	1 MHz
$\pm 5 \sim 20$ MHz	-13 dBm	1 MHz
$\pm 20 \sim 25$ MHz	-25 dBm	1 MHz



Amendment of technical standards for radio facilities

- ▶ ② The technical standards for radio facilities for intelligent transportation systems using radio waves in the frequency band **5895-5925MHz** are as follows.
1. The occupied frequency bandwidth shall be 10 MHz or less
 2. The modulation method is digital modulation, and the connection method is carrier-sensing multiple access/collision avoidance method (CSMA/CA)
 3. The center frequency of the radio wave to be emitted shall be 5900 MHz, 5910 MHz, and 5920 MHz
 4. The antenna supply power shall be 100 m² or less, and the equivalent isotropic radiation power shall be 2 W or less
 5. The frequency deviation shall be within $\pm 20 \times 10^{-6}$ of the center frequency
 6. Unnecessary firing shall be less than or equal to the following reference value



Amendment of technical standards for radio facilities

a. an out-of-band launch

Occupancy Frequency Bandwidth Separation Frequency from End	Reference value (average power)	Decomposed bandwidth
± 5.0 MHz	-26 dBm	100 kHz
± 5.5 MHz	-32 dBm	100 kHz
± 10 MHz	-40 dBm	100 kHz
± 15 MHz	-50 dBm	100 kHz

b. Spurious Launch

Frequency range	Reference value	Decomposed bandwidth
Less than 1 GHz	-36 dBm	100 kHz
More than 1 GHz	-30 dBm	1 MHz

 **Inquiries**

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