

# ICR2015 Workshop [WS9-Th-3/WS9-Th-4]

# "Risk Assessment of Mildly Flammable Refrigerants" Hosted by New Energy and Industrial Technology Development Organization (NEDO)

Thursday, August 20, 2015 Room304, Conference Center 3rd Floor, Pacifico Yokohama

## **WS Program**

# [Session 1] "Research Project on Risk Assessment of Mildly Flammable Refrigerants" Chair: Satoru FUJIMOTO, (JRAIA, Sub Project Leader of NEDO-Project)

No.	Time Distribution		Title	Speaker	
1.1	13:30~13:33	Opening Remarks		Munehiko TSUCHIYA Executive Director, NEDO	
1.2	13:33~13:38	Introduction	Overview of the NEDO-Project  - Technology Development of High-efficiency Non-fluorinated Air-conditioning Systems -	Mika SUZAWA Chief Officer, NEDO	
1.3	13:38~13:43	Introduction	Research Project on Risk Assessment of Mildly Flammable Refrigerants	Eiji HIHARA Professor, The University of Tokyo Project Leader of NEDO-PJ	
1.4	13:43~14:03	Presentation	Fundamental and Practical Flammability Properties of 2L Refrigerants	<i>Kenji TAKIZAWA</i> Senior Researcher, AIST	
1.5	14:03~14:23	Presentation	Hazard assessment of the combustion of mildly flammable refrigerants	<i>Tei SABURI</i> Senior Researcher, AIST	
1.6	14:23~14:43	Presentation	Experimental Evaluation of Physical Hazard of A2L Refrigerant Assuming Actual Handling Situations	Tomohiko IMAMURA Junior Associate Professor, Tokyo University of Science, Suwa	
1.7	14:43~14:58	Presentation	Diesel Combustion of Oil and Refrigerant Mixture during Pump Down of Air Conditioners	Chaobin DANG Associate Professor, The University of Tokyo	
1.8	14:58~15:10	Discussion			

15:10~15:30 Coffee Break



## [Session 2] "Risk Assessment of Mildly Flammable Refrigerants"

### Chair: Eiji HIHARA, (The University of Tokyo, Project Leader of NEDO-Project)

No.	Time Distribution		Title	Speaker
2.1	15:30~15:40	Introduction	Basic Procedure of the Risk Assessment in JRAIA	Satoru FUJIMOTO JRAIA, Sub Project Leader of NEDO-PJ (Daikin Industries, Ltd.)
2.2	15:40~15:55	Presentation	(Risk Assessment in JRAIA) Overview of the Risk Assessment for Residential Air-Conditioners	<i>Kenji TAKAICHI</i> JRAIA, (Panasonic Corporation)
2.3	15:55~16:10	Presentation	(Risk Assessment in JRAIA) Overview of the Risk Assessment for VRF System	<i>Ryuzaburo YAJIMA</i> JRAIA, (Daikin Industries, Ltd.)
2.4	16:10~16:25	Presentation	(Risk Assessment in JRAIA) Overview of the Risk Assessment for Chiller	<i>Kenji UEDA</i> JRAIA, (Mitsubishi Heavy Industries, Ltd.)
2.5	16:25~16:40	Presentation	Overview of AHRI Risk Assessment Studies for A2L Refrigerants	Xudong WANG Ph.D, Air-Conditioning, Heating, and Refrigeration Institute(AHRI)
2.6	16:40~16:55	Presentation	Research on Flammability of the lower GWP refrigerants	Zhao YANG Professor, Tianjin University
2.7	16:55 <b>~</b> 17:10	Discussion		

### Downloadable internet address of the distribution document

#### Risk Assessment of Mildly Flammable Refrigerants 2014 Progress Report

(English) http://www.jsrae.or.jp/committee/binensei/2014PR\_e.pdf

http://www.jsrae.or.jp/committee/binensei/2014PR\_e\_ab.pdf (Abstract)

(Japanese) http://www.jsrae.or.jp/committee/binensei/2014PR\_j.pdf

http://www.jsrae.or.jp/committee/binensei/2014PR\_j\_ab.pdf (Abstract)

#### •Fluorinated Reduction Technologies 2014 —Toward the Prevention of Global Warming—

(English) http://www.nedo.go.jp/library/pamphlets/EV\_201403\_flon\_en.html (Japanese) http://www.nedo.go.jp/library/pamphlets/EV\_201403\_flon\_jp.html

#### Profile of NEDO 2015

(English) http://www.nedo.go.jp/library/pamphlets/KH\_201508\_en\_goannai.html (Japanese) http://www.nedo.go.jp/library/pamphlets/KH\_201504\_goannai.html

#### -NEDO 環境分野の取り組み 2014

(Japanese) http://www.nedo.go.jp/library/pamphlets/EV\_201501\_kankyo.html

#### Notes

- ·AIST: National Institute of Advanced Industrial Science and Technology
- •JRAIA: The Japan Refrigeration and Air Conditioning Industry Association
- •NEDO: New Energy and Industrial Technology Development Organization