Workshop Title: Progress of Sorption Systems in Japan

Participants:

	Name	Chair/Speaker	Affiliation
1	Kiyoshi Saito	Chair	Waseda university
2	Seiichi Yamaguchi	Co-Chair	Waseda University
3	Nobuki Matsui	Speaker	Daikin Industries, Ltd.
4	Hiko Miyauchi	Speaker	Dyna Air Co., Ltd
5	Hajime Yabase	Speaker	Kawasaki Thermal Eng. Co. Ltd.
6	Naoyuki Inoue	Speaker	Ebara Corporation
7	Olexiy Buyadgie	Speaker	V.S. Martynovsky Institute of Refrigeration, Cryogenic Technologies and Eco-Energetics/Wilson

Abstract:

・Objective

Sorption systems have been widely commercialized as desiccant, absorption and adsorption. Recently, research and development regarding sorption systems are active in hybrid desiccant with vapor compression cycle, solar assisted gas fired absorption chiller and multi stage heat transformer (or type 2 absorption heat pump) obtaining 180℃ with waste heat only as driving heat source. In this workshop, progress of sorption systems in Japan is reported and discussed. The workshop dedicates research and development of future sorption systems.

・Background

Research and development of sorption systems in Japan is conducted in energy efficiency point of view for equipments and broadening application range. It is valuable for participants to be introduced Japanese state of the art sorption systems as thermally driven heat pump with renewable energy, solar heat and waste heat in particular.

・Presentations

1. Introduction: 5 minutes
   Dr. Prof. Kiyoshi Saito (Waseda University)
2. Advances in Sorption Systems : 15 minutes
   Dr. S., Yamaguchi (Waseda University)

CONTACT: ***Secretariat of the 24th IIR International Congress of Refrigeration (ICR2015)***
c/o ICS Convention Design, Inc.
Chiyoda Bldg., 1-5-18 Sarugakucho, Chiyoda-ku, Tokyo 101-8449, Japan
Tel: +81-3-3219-3541 Fax: +81-3-3219-3577 Email: icr2015@ics-inc.co.jp

3. Hybrid Solid Desiccant System (Desica) : 15 minutes
   Mr. N., Matsui (Daikin)
4. Liquid Desiccant System : 15 minutes
   Mr. Hiko Miyauchi (Dyna Air)
5. Solar Driven Absorption Chiller : 15 minutes
   Mr. H, Yabase (Kawasaki Thermal Eng.)
6. Development of Type-II Absorption Heat Pump (Heat Transformer) : 15 minutes
   Dr. N., Inoue (Waseda University)
7. Maisotsenko Cycle Based Air-Conditioning Systems: Ejector Cooling and Solid Desiccant : 15 minutes
   Olexiy Buyadgie (V.S. Martynovsky Institute of Refrigeration, Cryogenic Technologies and Eco-Energetics/Wilson)
8. Discussion and Conclusion：5 minutes
   Dr. Prof. Kiyoshi Saito (Waseda University)

Contact information:

1. Name: Kiyoshi Saito
2. Affiliation/Organization name: Dept. of Applied Mechanics and Aerospace Engineering School of Fundamental Science and Engineering, Waseda University
3. Address: 3-4-1 Ookubo, Shinjuku, Tokyo, 169-8555, Japan
4. E-mail address: saito@waseda.jp