# Agenda of the 6<sup>th</sup> Japan-Korea Joint Seminar On Space Environment Utilization Research

October 16 - 17, 2009

Korea Aerospace Research Institute

### October 16

09:30 am

Opening Remarks and Welcome Welcoming Remarks

Prof. Chi-Hwan LEE, Inha University

■ Seminar Perspectives

Objective of the Seminar: Perspective of Korea **Prof. Chi-Hwan LEE, Inha University** 

Objective of the Seminar: Perspective of Japan

Prof. Makoto ASASHIMA, University of Tokyo

10:00 am

■ Space Program Introduction

Korea Space Program towards ISS Utilization (tentative)

Dr. Gi-Hyuk CHOI, 부서명, KARI

JAXA Space Utilization Program (tentative)

Mr.Tetsuo TANAKA and Mr.Nobuyoshi FUJIMOTO Space Environment Utilization Center JAXA

Space Missions in ISS by The First Korean Astronaut

Dr. So Yeon Lee (영문 확인 요), 부서명, KARI

Overview of Sciences onboard ISS/JEM

Prof.Shinichi YODA, ISS Projet Office, JAXA

12:00 pm **Lunch** 

1:00 pm

■ Life Science & Biomedical Engineering

Countermeasure against muscle atrophy by endurance exercise: Muscle catch-up process Prof. Inho CHOI, Mr. Taesik GWAG, and Dr. Kisoo LEE, Division of Biological Science and Technology, Yonsei University

(Title, TBD)

Prof. Duk-Ju LEE, Korea Advanced Institute of Science & Technology

Dome gene experiment of space flight in ISS Prof.Makoto ASASHIMA, University of Tokyo Molecular mechanism and new drug design of unloading-associated muscle atorophy(II)

Prof. Takeshi NIKAWA, Tokushima University

3:20 pm Break

3:30 pm

## ■ Fluid Physics

An atmospheric model on the space colony of O'neill cylinder

Prof. Jun Sang PARK, Halla University, and Prof. Jae Min HYUN, Korea Advanced Institute of Science & Technology

Thermophysical property measurements under microgravity

Prof. Taketoshi HIBIYA, Keio University

Numerical Study for Liquid Sloshing in a Container

Prof. Toshio TAGAWA, Tokyo Metropolitan University

## ■ Molecular Biology and Biochemistry

Focused structural proteomics research with human Protein Tyrosine Phosphatases

Dr. Tae-Sung YOON, Korea Research Institute of Bioscience and Biotechnology

Protein crystal growth in microgravity and structural analysis

Prof. Masaru TANOKURA, University of Tokyo

# October 17, 2009

9:30am

### Astrophysics

Ultra Fast Flash Observatory (UFFO) for observation of prompt photons from Gamma Ray Bursts in space

Prof. II H. Park and the UFFO collaboration, Ewha University

JEM-EUSO : Japanese Experimental Module - Extreme Universe Space Observatory (Tentative title)

Dr. Toshikazu Ebisuzaki, RiKEN

### Combution

Research on Solid Material Flammability in Microgravity

Prof.Osamu FUJITA, Hokkaido University

Flame spread characteristics in electrically charged wires

Prof.Jeong Park, Pukyung National University, Prof. Suk Ho Chung, KAUST and Mr. Min Kook Kim, Seoul National University

### ■ Material Science/Chemistry

A Study on solidification phenomena of Mg-Zr Alloy on ground

Prof. Chi-Hwan LEE, Inha University

Measurement of Mass Diffusion Coefficient of

Multi-Component System in Aqueous Media by Phase Shifting Interferometer Prof.Atsuki KOMIYA, Tohoku University

■ Discussion and Summary