

NSRL-ICCHIBAN Brief Report, ICCHIBAN-7&8 Announcement and Future ICCHIBAN experiments

¹Yukio Uchihori, ^{2,3}Eric Benton, ¹Nakahiro Yasuda, ¹Hisashi Kitamura, ⁴Jack Miller, ICCHIBAN Working Group and ICCHIBAN participants

¹*National Institute of Radiological Sciences*, ²*Eril Research Inc.*, ³*Oklahoma State Univ.*, ⁴*Lawrence Berkley National Laboratory*

On 28-30 Sept. 2004 ICCHIBAN intercomparison experiments were performed at NASA Space Radiation Laboratory (NSRL), Brookhaven National Laboratory (BNL), USA. The NSRL facility was constructed to irradiate biological samples and physical instruments with high energy heavy ion and proton beams. Using 1 GeV proton, 1 GeV Oxygen and 1 GeV Iron beams, instruments and dosimeters for space radiation dosimetry were investigated for their responses to these artificial radiation sources. Around 20 researchers performed these experiments by themselves and ICCHIBAN Working Group (ICWG) performed exposures to passive dosimeters from totally 15 institutions. We report outlook of these experiments briefly.

After this workshop the ICCHIBAN-7 and -8 (IC-7 & -8) experiments will be performed using the HIMAC. IC-7 is dedicated to the intercomparison of active instruments and IC-8 is dedicated to the intercomparison of passive dosimeters. Participants include both laboratories that have participated in previous ICCHIBAN experiments as well as a number of first time participants. For IC-7 400 MeV/nucleon Oxygen and 300 MeV/nucleon Iron will be provided in the HIMAC PH2 beam course. For IC-8 Helium 150 MeV/nucleon, 400 MeV/nucleon Oxygen, 500 MeV/nucleon Argon and 200 MeV/nucleon Fe will be provided in the HIMAC BIO exposure room. The current status of reporting of results from previous ICCHIBAN experiments as well as the future ICCHIBAN experiments will also be discussed.